

VITAL HEALTH STATISTICS

Hospital Use in Poland and the United States

This report presents national statistics on hospital use from the U.S. National Hospital Discharge Survey and the Polish General Hospital Morbidity Study. Comparisons are made of discharge rates, average lengths of stay, rates of patient care days, and fatality rates by sex, age, and diagnostic category. The similarities and differences between the two countries in population characteristics, health status, health services systems, and health care resources are also described.

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Under the legislation establishing the National Health Survey, the Public Health Service is authorized to use, insofar as possible, the services or facilities of other Federal, State, or private agencies.

In accordance with specifications established by the National Center for Health Statistics, the U.S. Bureau of the Census, under a contractual arrangement, participated in planning the survey and collecting the data.

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Symbols

---	Data not available
...	Category not applicable
-	Quantity zero
0.0	Quantity more than zero but less than 0.05
Z	Quantity more than zero but less than 500 where numbers are rounded to thousands
*	Figure does not meet standards of reliability or precision
#	Figure suppressed to comply with confidentiality requirements

Hospital Use in Poland and the United States

by Lola Jean Kozak and W. Edward Bacon, Division of Health Care Statistics, U.S. National Center for Health Statistics, and Michal Krzyzanowski and Bogdan Wojtyniak, Department of Medical Statistics, Polish National Institute of Hygiene

Introduction

Marked differences exist among countries in the way health services are organized and provided. Fueled at least partly by current concerns about the high cost of health care, there have been numerous cross-national studies in recent years comparing health delivery systems (Maxwell, 1981). By comparing the delivery of health care across countries, new approaches may be discovered for providing health care in a more efficient manner. Particularly important are cross-national comparisons of systems in which health services are provided and financed in different ways, but the health status of the populations being compared does not vary markedly.

Studies comparing hospital use among countries have been particularly popular partly because hospital care typically represents a large proportion of total health care costs but also because hospital statistics are generally more available than are data on other components of health care. Further, it is often assumed that hospital statistics are more comparable from country to country than are statistics on other components of health care. However, a major problem with most cross-national studies including comparisons of hospital use has been the comparability of data sources. Typical problems in comparing hospital use include differences in the way facilities are classified, differences in coverage (particularly for long-term care and private hospitals), differences in the definition of use measures such as hospital discharge and bed day, and differences in disease classification and coding systems (NCHS, 1980a).

The use of hospitals in Poland and the United States was compared for three main reasons. First, few international

comparisons of hospital care have involved countries of Eastern Europe. Second, Poland and the United States organize and finance health care in very different ways, yet both are developed, industrial countries and do not appear to differ markedly in the health status of their respective populations. Third, both countries collect very comparable national data on hospital use.

This report is organized into three main sections. The first section deals with a general description of the similarities and differences between the two countries in population characteristics, measures of health status, the health care system, and health resources. This section focuses on factors that are known to affect hospital use and is based on 1980 statistics wherever possible. Unless otherwise noted, the Polish data in this section were taken from the Demographic Yearbook (Główny Urząd Statystyczny, 1982a) or the Statistical Yearbook of Health Care (Główny Urząd Statystyczny, 1982b) published by the Polish Central Statistical Office. The sources of the U.S. data, except as otherwise noted, were the *Statistical Abstract of the United States* (U.S. Bureau of the Census, 1985), or *Vital Statistics of the United States* (NCHS, 1985a).

The second section describes the two sources of data on hospital use—the 1980 Polish General Hospital Morbidity Study and the 1980 National Hospital Discharge Survey. The third section reports the results of the comparisons of discharge rates, average lengths of stay, rates of patient care days, and fatality rates between Poland and the United States, by age, sex, and diagnostic category.

Highlights

- U.S. patients were discharged from the hospital at a 62-percent higher rate than Polish patients.
- Higher U.S. discharge rates held for patients of all ages except those 5–14 years of age, and the U.S. discharge rate for patients 85 years of age and over was four times the Polish rate.
- The average length of stay was more than twice as long in Poland as in the United States.
- Total hospital use, as measured by rates of patient care days, was 37 percent higher in Poland than in the United States. Children used hospital care at a higher rate in Poland, but patients 75 years of age and over used more hospital care in the United States.
- The diagnostic category responsible for the most discharges in Poland was diseases of the respiratory system, but diseases of the circulatory and digestive systems were leading diagnostic categories in the United States.
- Although U.S. discharge rates were higher for most diagnostic categories, the Polish rate was higher for infectious and parasitic diseases because of much higher discharge rates for tuberculosis and hepatitis.
- For infants under 1 year of age, diseases of the respiratory system accounted for 46 percent of discharges in Poland, but certain conditions originating in the perinatal period accounted for 50 percent of discharges in the United States.
- The discharge rate for circulatory diseases was higher for infants under 1 year of age in the United States, but higher for children 1–14 years of age in Poland.
- Children 1–14 years of age were more often hospitalized in Poland for acute respiratory infections, pneumonia, and bronchitis and emphysema. In the United States they were more often hospitalized for chronic disease of tonsils and adenoids, and asthma.
- For diseases of the ear and mastoid process, U.S. children 1–14 years of age had a discharge rate four times that of Polish children, but the Polish average length of stay was more than seven times the U.S. average.
- Appendicitis was a more frequent diagnosis in Poland than in the United States for patients 1–14 and 15–44 years of age.
- In Poland, the discharge rate for patients 15–44 years of age with gastric and duodenal ulcers was three times the rate in the United States.
- U.S. females 15–44 years of age had a discharge rate 10 times that of Polish females for disorders of the breast.
- U.S. discharge rates for diabetes mellitus, rheumatism, and dislocations, sprains, and strains were from 2.6 to 13 times Polish rates for the three age groups 15 years and over.
- The average lengths of stay for cataract for Polish patients aged 45–64 years and 65 years and over were more than seven times those for U.S. patients.
- Polish rates of patient care days for the individual age groups for bronchitis and emphysema were from 4 to 37 times U.S. rates.
- For patients 65 years of age and over, the U.S. discharge rate for acute cerebrovascular disease was three times the Polish rate, but the Polish rate for atherosclerosis was more than four times the U.S. rate.
- One of every four Polish patients 85 years of age and over was discharged dead, compared with one of every eight U.S. patients.
- Fatality rates were higher in Poland for most diagnostic categories, but the rates were not very different in the two countries for neoplasms.
- Fatality rates for patients 65 years of age and over were higher in the United States for infectious and parasitic diseases and for respiratory diseases.

General comparisons

Population

The Polish People's Republic covers an area of approximately 120,700 square miles and lies primarily in the great European lowland. In 1980, 35.6 million people lived in Poland, or 295 persons per square mile. The population residing in the United States in 1980 was 226.5 million people, but the population density was 64 persons per square mile. Although the population density was much less in the United States, the population tended to be concentrated in urban areas. Only 26 percent of the U.S. population lived in rural areas, compared with 41 percent of the Polish population. Further, fewer than 3 percent of the U.S. population were farmers, although 45 percent of the land was farmed. In Poland, 23 percent of the population were considered farmers, and 61 percent of the land was farmed.

Compared with the United States, the Polish population is relatively homogeneous. Virtually all are white and of Polish origin, and most are Roman Catholic. A relatively large part of the U.S. population (17 percent) is not white, and residents come from many ethnic backgrounds and hold different religious beliefs. People of European ancestry—primarily English, German, and Irish—represent the larger ethnic groups. About 60 percent of the population are church members, with Protestants representing the largest religious body and Roman Catholics the next largest.

Comparisons of the age and sex structures of the Polish and U.S. populations are presented in figure 1. Overall, the age and sex structures of the two populations are fairly similar. A larger proportion of the population in the United States than in Poland is 85 years of age or older, and a larger proportion in Poland is under 5 years of age. Also, a greater proportion of males in the United States is 55 years of age and older. Population data for the two countries are provided in table 1.

Marital status of the two populations is shown in figure 2. (U.S. Bureau of the Census, 1981). Nearly the same percents of men are either widowed or single in both countries. Similarly, nearly the same percents of women in both countries are either widowed or single. More males and females are married in Poland and more are divorced in the United States, but this would be expected given the cultural and religious differences between the two countries.

Differences exist between the two countries in household composition and size. In Poland, one or more families live in 82 percent of the households, compared with 74 percent in the United States. Average size of the family in family

households is about the same in the two countries, 3.3 persons per household. In both countries, the vast majority of nonfamily households are composed of one person. However, subfamilies are twice as likely to live in Polish households. One in 20 family households has at least one related or unrelated subfamily, compared with 1 in 40 family households in the United States. Because of the greater proportion of family households and subfamilies within households, household size is larger in Poland—3.1 persons, compared with 2.8 persons in the United States. Table A shows the percent distribution of households by number of persons.

Table A. Percent distribution of households by size: Poland, 1978, and the United States, 1980

<i>Size of household</i>	<i>Poland</i>	<i>United States</i>
<i>Percent of households</i>		
All households	100	100
1-person households	17	23
2-person households	22	31
3-person households	23	17
4-person households	21	16
5-person households	10	8
6-person households	4	3
7-person households	3	2

The educational levels of the citizens of the two countries differ, at least in terms of the number of years of school completed. In the United States, the median number of years of school completed for persons 14 years of age and over is 12.4 (U.S. Bureau of the Census, 1984). In Poland, three of four persons 15 years of age and older have less than a high school education. Figure 3 shows the percents of the population having less, exactly, or more than a high school education, for both Poland and the United States. Although the U.S. population has completed more years of school on the average, the educational systems in the two countries differ; therefore, the quality of the education received may also differ.

The proportion of the population in the labor force is slightly higher in Poland than in the United States, 67 versus 64 percent. However, as seen in figure 4, this difference is due to the larger proportion of females in the labor force in Poland. The proportion of males is the same in both countries. In the United States, about 5 percent of the population is unemployed, which is defined as actively seeking work or as being on a temporary layoff. Unemployment by this

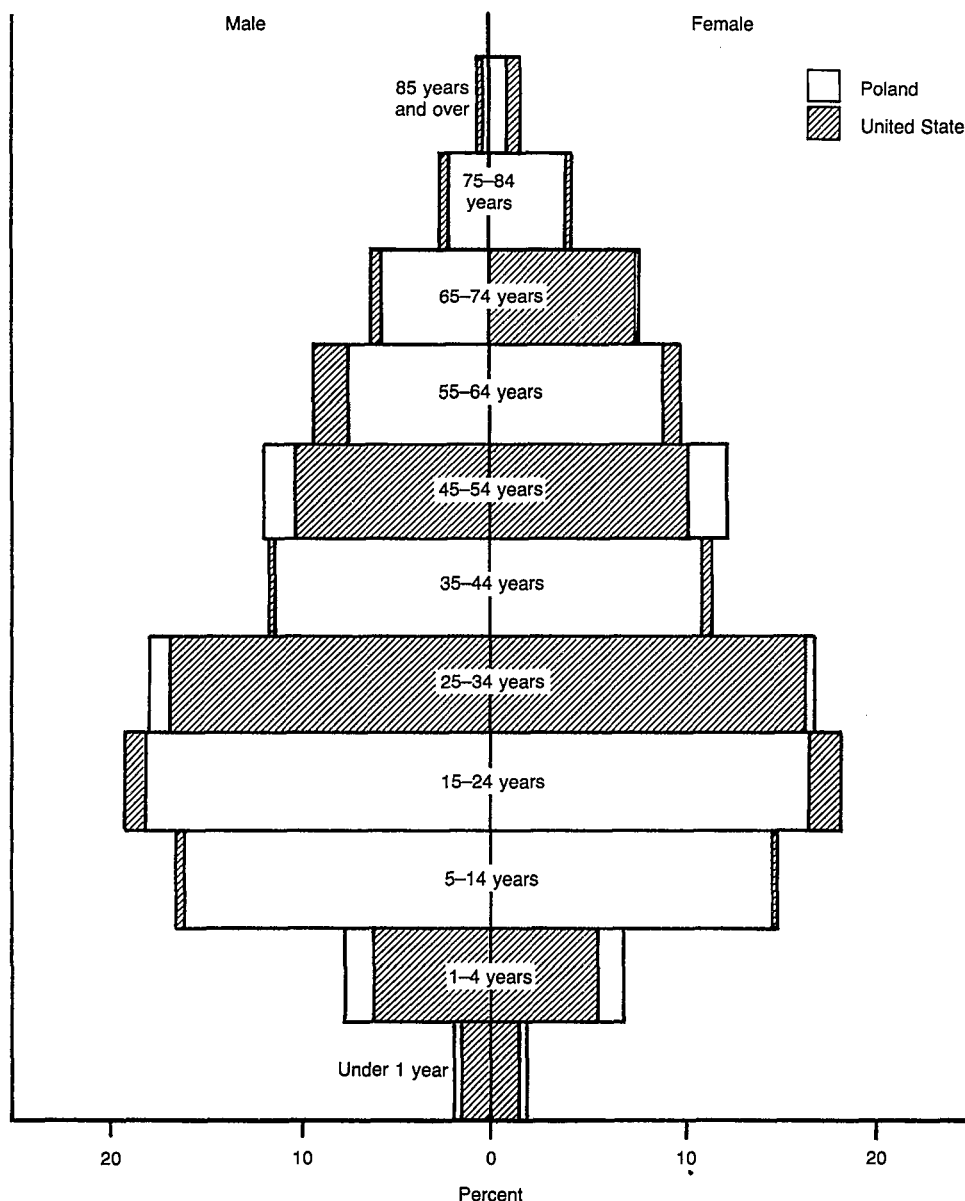


Figure 1. Percent distribution of the population by age, according to sex: Poland and the United States, 1980

definition does not exist in Poland. Table B shows the percent of the population in the labor force by age and sex for Poland and the United States (U.S. Bureau of Labor Statistics, 1983). The percent of males 25 to 64 years of age in the labor force is similar in the two countries. However, a greater proportion of males under the age of 25 years are occupationally active in the United States, and a greater percent of males 65 years of age and over are in the labor force in Poland. The proportion of females in the labor force is greater in Poland for all age groups over 25 years.

There also are differences between the two countries in the distribution of the labor force by industry or occupation. Table C indicates that about 1 in 4 members of the Polish

labor force is a farmer, compared with 1 in 25 members of the United States labor force. On the other hand, substantially greater proportions of the labor force are employed in trade and service industries in the United States than in Poland. Caution should be observed in interpreting small differences in table C because of the different classification systems used to group industries.

Health status

The 1980 mortality statistics suggest that residents of the United States are healthier than are residents of Poland. Life expectancy at birth was 74 years in the United States,

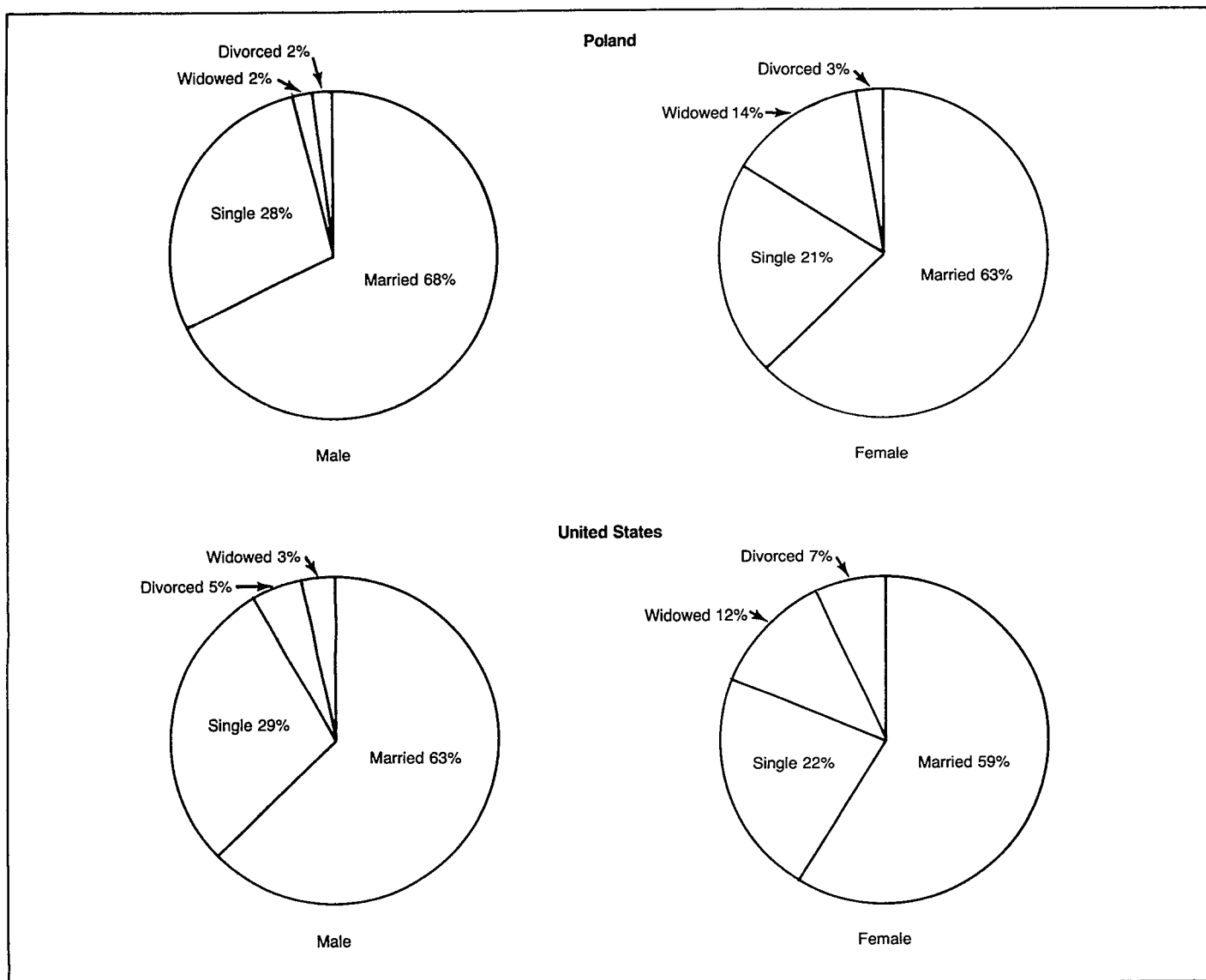


Figure 2. Percent distribution of the population 15 years of age and over by marital status, according to sex: Poland and the United States, 1980

Table B. Percent of the population in the labor force by sex and age: Poland, 1978, and the United States, 1980

Age	Male		Female	
	Poland	United States	Poland	United States
Percent of population				
15-19 years ¹	29.0	60.5	21.1	52.9
20-24 years	82.2	85.9	68.4	68.9
25-34 years	96.6	95.2	69.6	65.5
35-44 years	95.5	95.5	82.3	65.5
45-54 years	89.7	91.2	75.0	59.9
55-64 years	74.3	72.1	50.0	41.3
65 years and over	34.9	19.0	19.4	8.1

¹16-19 years for the United States.

NOTE: The labor force in Poland is all persons 15 years of age and over who are occupationally active. The labor force in the United States is all persons 16 years of age and over who are employed, actively seeking work, or on a temporary layoff.

Table C. Percent distribution of the employed labor force by industry: Poland and the United States, 1980

Industry	Poland ¹	United States
Percent distribution		
Total	100	100
Manufacturing and mining	32	23
Agriculture and forestry	27	24
Trade	8	20
Construction	8	6
Transportation and communication	7	7
Finance, insurance, and real estate	3 ⁵	6
Services	12	29
Education	4 ⁵	8
Health and social	4	9
Entertainment and recreation	5 ¹	1
Other	2	11
Public administration	1	5

¹In Poland the labor force is all persons 15 years of age and over who are occupationally active. All members of the labor force are employed.

²Includes fisheries.

³Includes communal services.

⁴Includes research.

⁵Includes culture and art.

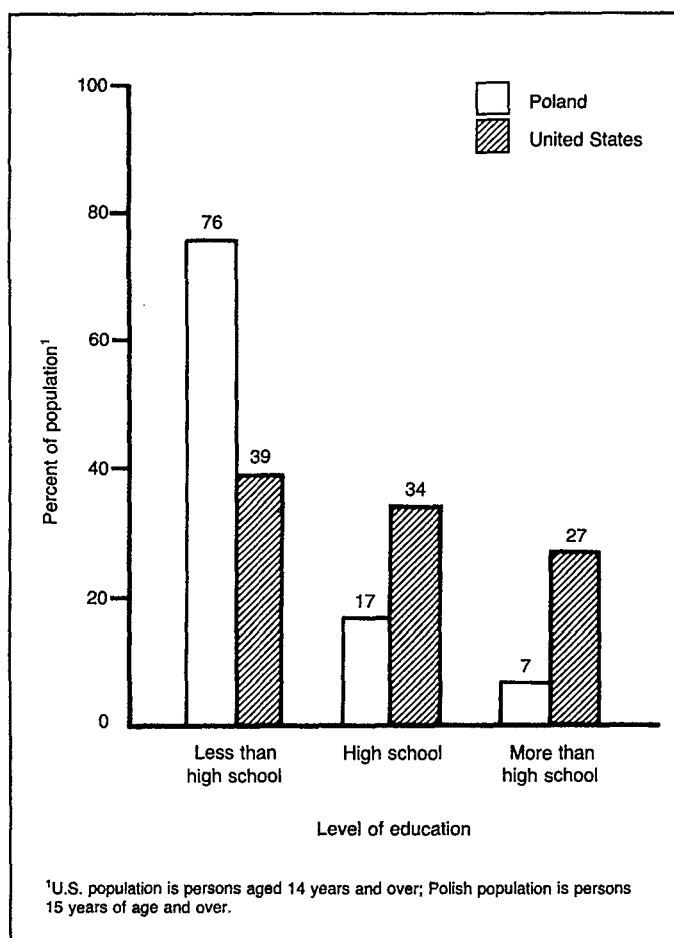


Figure 3. Percent distribution of population by level of education: Poland and the United States, 1978

compared with 71 years in Poland. Females were expected to live approximately 8 years longer than males in both countries. The overall mortality rate was somewhat higher in Poland than in the United States (9.8 versus 8.8 per 1,000 population), but the infant mortality rate was substantially higher (21.3 versus 12.6 per 1,000 live births). Death rates by age are shown in figure 5. Rates were higher in Poland for all age groups except for 15–24 years. U.S. death rates were much higher in this age group for motor vehicle traffic accidents and homicide. Leading causes of death were diseases of the circulatory system and malignant neoplasms, which account for approximately two of three deaths in both countries. Causes of death for the two countries for each sex and for five age groups are compared in tables 2 and 3.

Although mortality statistics favor U.S. residents, researchers using other indicators in studies of elderly populations have concluded that there is little difference in health status among industrialized countries. For example, Shanas (1974) reported that 4 percent of the noninstitutionalized population aged 65 years and older were bedfast in Poland, compared with 2 percent in the United States, and that 6 percent were housebound in both countries.

Health care system

Almost all health care in Poland is provided through a multi-tiered, nationalized system. With few exceptions, med-

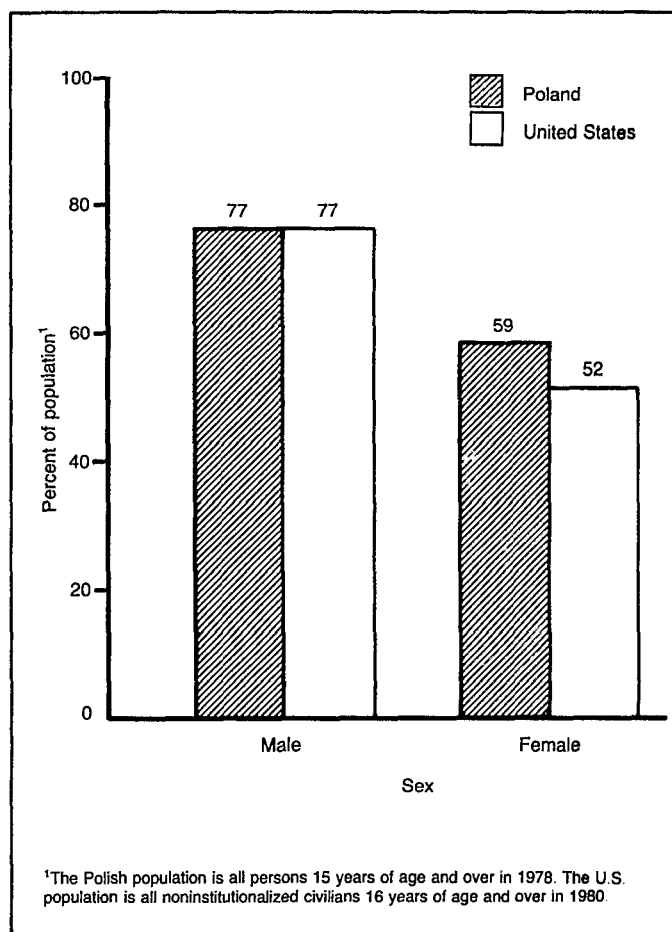


Figure 4. Percent of population in labor force by sex: Poland and the United States

ical care is free to Polish citizens. Some ambulatory medical care is provided by cooperatives and physicians (physicians are allowed a private practice on a part-time basis in addition to their full-time practice in the nationalized system) on a fee-for-service basis, but the care that is paid for by a patient represents a small proportion of the total (2 percent of office and home visits). All hospital care is provided through the nationalized system.

With the exception of a few special populations such as the military, the whole health care system is the responsibility of one central government agency, the Ministry of Health and Social Welfare. The Ministry works through regional units in each of the 49 provinces, which in turn oversee the programs in the health service areas within the province. In addition to administrative responsibilities at the regional level, many specialized services that are not available at the local level are provided directly to patients through regional facilities and programs. The regional hospitals also fulfill important functions in medical research and education.

In theory, health services are integrated at the local level. Each health service area has at least one hospital and several ambulatory and long-term care facilities, all under a medical director. Primary care is provided in the towns through physicians and in rural areas through small health centers. Special preventive care is provided to such defined population groups as infants and children. More specialized care is provided by dispensaries, outpatient clinics, emergency stations, and

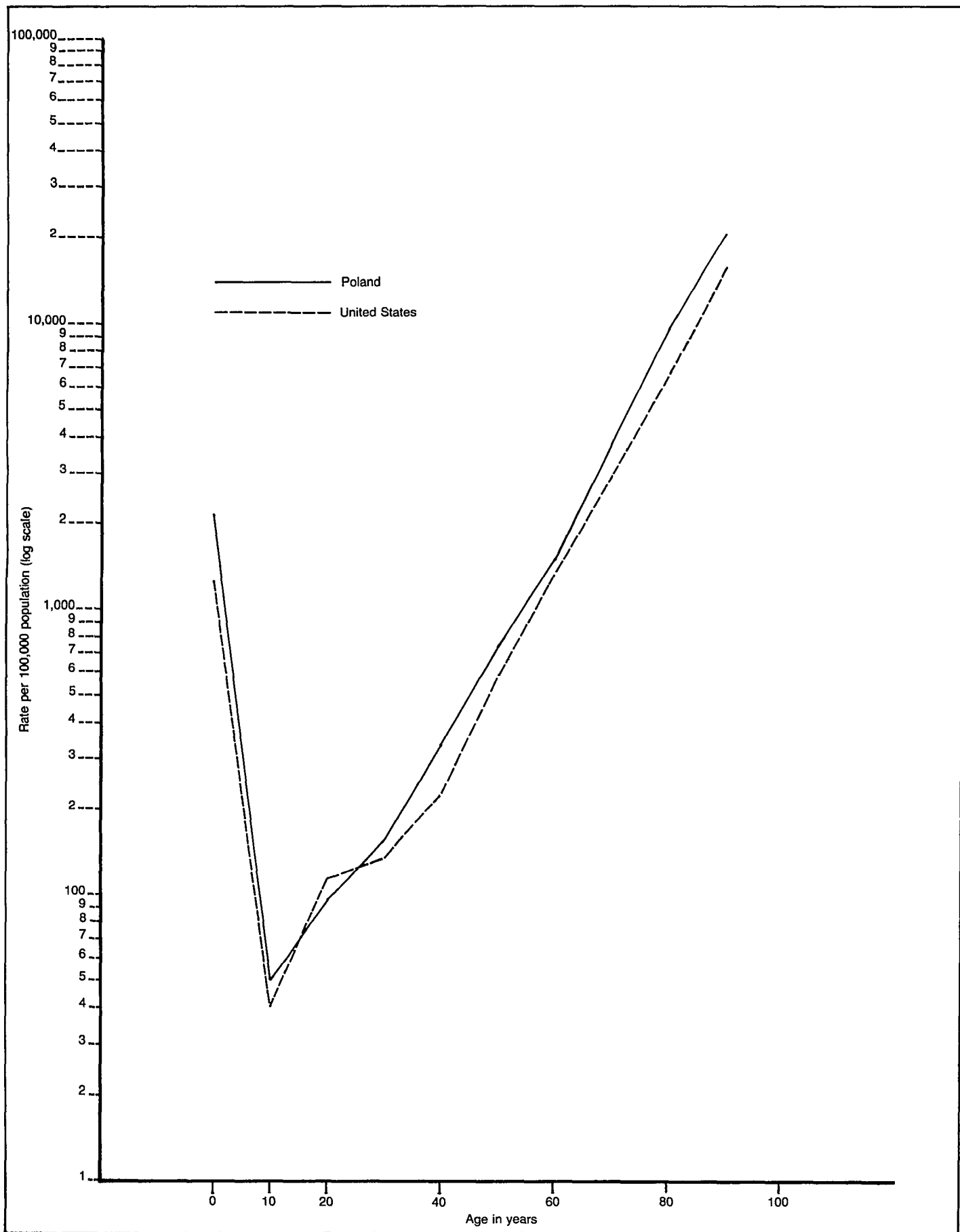


Figure 5. Death rates per 100,000 population by age: Poland and the United States, 1980

hospitals. Institutional long-term care is provided through sanitariums, nursing homes, and homes for the chronically ill. Visiting nurses provide home health care to the chronically ill.

The stated objective of the Polish health care delivery system is to provide a continuity of preventive, curative, and rehabilitative services that are uniform, comprehensive and accessible; that are based on the needs of society; and that are managed and financed by the state. However, as in many Western countries, there is an uneven distribution of physicians between cities and rural areas, a shortage in some specialties, and concern about travel distance and waiting time (Webster, 1982).

The health care delivery system in the United States is more complex and has been described in detail elsewhere (Anderson, 1985; Starr, 1982). It differs from the Polish system in that it is a decentralized, private, fee-for-service system that is financed through a combination of public and private funds. Medical care, however, is publicly financed only for certain groups, such as the elderly and the poor, or for certain diseases associated with exorbitant treatment costs, such as end-stage renal disease.

Health resources

There are approximately 68,000 physicians in Poland, compared with 458,000 in the United States (NCHS, 1986b). Although the number of active physicians per 10,000 population is about the same in the two countries (18 in Poland and 20 in the United States), the use of ambulatory care is higher in Poland—6.5 visits per person per year, compared with 4.2 visits per person in the United States.

There are three levels of physician specialization in Poland. At the basic level is the general practitioner, who provides much of the medical care within a health service area. A general guideline is that one general practitioner be available for about 4,000 persons. The second level involves specialists in pediatrics, obstetrics, internal medicine, and general surgery. One specialist at this level serves a number of different health service areas. Specialists at the highest level practice in specialty clinics, of which there is usually only one per specialty within a province. Specialty clinics are usually part of a central hospital that provides highly specialized care.

Table D shows the percent distribution of active physicians by specialty for both countries. It should be noted that a specialist is defined differently in the two countries. In Poland, a physician must be fully trained and registered to practice a specialty to be counted as a specialist. In the United States, physicians are classified as specialists if they spend the majority of their professional hours practicing a specialty. Thus, residents in specialty training were counted as specialists in the United States but as general practitioners in Poland. If residents were switched to the general practice category in the United States, general practice would account for 27 percent of U.S. physicians, which is similar to the 30 percent reported for Poland. In spite of the more restricted definition, Poland has a higher percent of physicians in the specialties of pediatrics and otolaryngology.

Two levels of nurses are found in Poland, full nurse and assistant nurse, which are comparable in terms of education and training with registered nurses (RN's) and licensed practical nurses (LPN's) in the United States. The supply of active nurses per capita for each skill level was smaller in Poland. There were 41 full nurses and 3 assistant nurses per 10,000 population in Poland; 51 RN's and 25 LPN's per 10,000 population in the United States (Bureau of Health Professions, 1981). However, Poland also had 4.5 midwives and fieldshers (physician's assistants) per 10,000 population. In the United States the small number of midwives was included in the statistics on RN's, and there were only 0.3 physician's assistants per 10,000 population (Bureau of Health Professions, 1984).

The 641 general and specialty hospitals in Poland equate to approximately 2 hospitals per 100,000 population. In the United States, there are 6,229 short-stay hospitals (Federal and non-Federal), or nearly 3 per 100,000 population (NCHS, 1985b). However, hospitals in Poland tend to be larger than hospitals in the United States (table E), and therefore more hospital beds are available per capita—5.6 per 1,000 versus 4.8 per 1,000.

Table D. Percent distribution of physicians by specialty: Poland and the United States, 1980

Specialty	Poland ¹	United States ²
Percent distribution		
Total	100	100
General practice	30	14
Internal medicine	13	17
Pediatrics	10	7
Obstetrics and gynecology	7	6
Ophthalmology	3	3
Otolaryngology	3	2
Other surgical specialties	9	16
Psychiatry	2	7
Anesthesiology	3	4
Radiology	2	3
Other specialties	18	21

¹Physicians by specialty in which registered.

²Active physicians classified by specialty in which largest number of professional hours were spent. Excludes physicians whose specialties were unknown. SOURCE: Bidese, C.M., and Danais, D.G., Department of Survey and Data Resources, 1982. *Physician Characteristics and Distribution in the U.S.*, 1981 Edition. Chicago: American Medical Association. (Copyright 1982: Used with the permission of the American Medical Association).

Table E. Percent distribution of general and specialty hospitals by bedsize: Poland and the United States, 1980

Bedsize	Poland	United States ¹
Percent distribution		
All hospitals	100	100
0-99 beds	13	47
100-199 beds	26	23
200-499 beds	46	24
500 beds or more	16	6

¹Data are for community hospitals, which are short-stay, non-Federal hospitals, excluding institutional hospitals. SOURCE: American Hospital Association, 1981. *Hospital Statistics, 1981 Edition*. Chicago: American Hospital Association. (Copyright 1981: Used with the permission of the American Hospital Association).

Of the 641 Polish hospitals, 506 are hospitals providing care within a particular health service area. The remaining hospitals are primarily referral hospitals or provide care to a specific subpopulation. These include 72 regional hospitals, 46 hospitals that are associated with medical academies and research institutes, and 17 hospitals operated by the Ministry of Transportation that are mainly for transportation workers but that also provide care to victims of traffic accidents. In addition to the hospitals described above, 40 Polish hospitals provide primarily psychiatric services, and 30 sanitariums specialize in the treatment of tuberculosis and other respiratory diseases. In the United States, there are 558 psychiatric hospitals, 11 hospitals specializing in the treatment of tuberculosis and other respiratory diseases, and 167 long-term general and other special hospitals.

In Poland, 170 homes for the chronically ill and 101 homes for the aged provide long-term care comparable to that provided by 23,065 nursing and related care homes in the United States. Table F indicates that nursing homes in Poland are, on the average, nearly twice as large as in the United States; still, many fewer beds are available to the elderly on a per capita basis.

Besides hospitals and nursing homes, a variety of facilities provide medical, nursing, or personal care on an inpatient basis in Poland. Table G shows the number and average bedsize of these Polish facilities by type of facility, and table H shows the number and average size of other inpatient health facilities in the United States (NCHS, 1976). Like hospitals and nursing homes, other inpatient facilities tend to be larger

Table F. Selected characteristics of nursing and related care homes: Poland and the United States, 1980

<i>Characteristic</i>	<i>Poland</i>	<i>United States</i>
Number of homes	271	23,065
Average number of beds	117.6	66.7
Beds per 1,000 population 65 years and over . .	8.9	60.2

in Poland than in the United States. However, the number of beds per capita is lower in Poland (1.1 beds per 1,000) than in the United States (1.7 beds per 1,000) because of the relatively small number of other inpatient health facilities in Poland.

Table G. Number of certain inpatient facilities and average bedsize, by type of facility: Poland, 1980

<i>Type of facility</i>	<i>Number of facilities</i>	<i>Average bedsize</i>
Total	543	72
Blind	3	111
Neuropsychiatric diseases of children	5	229
Rehabilitation	35	127
Tuberculosis (students)	9	80
Alcoholics	7	108
Preventorium ¹	12	114
Neurologically handicapped	69	115
Mentally handicapped	198	103
Birthing	205	10

¹Facilities designed to prevent certain diseases, mainly tuberculosis, in persons at high risk. Treatment is generally not medical but climatic and nutritional.

Table H. Number of certain inpatient facilities and average bedsize, by type of facility: United States, 1976

<i>Type of facility</i>	<i>Number of facilities</i>	<i>Average bedsize</i>
Total	6,280	60
Blind or deaf	125	152
Emotionally disturbed	1,543	41
Physically handicapped	87	53
Alcoholics	798	30
Drug abusers	85	51
Neurologically handicapped	44	72
Mentally handicapped	1,875	97
Dependent children	867	46
Unwed mothers	105	29
Multiple and other disorders	751	43

Data sources

The hospital discharge data used in this report for the United States are from the 1980 National Hospital Discharge Survey (NHDS) and, for Poland, from the 1980 General Hospital Morbidity Study (GHMS). The two data systems contain basic demographic and diagnostic information about discharged patients collected on a national basis, allowing comparisons of discharge rates, average lengths of stay, rates of patient care days, and fatality rates by age, sex, and diagnosis.

The NHDS encompasses all short-stay, non-Federal hospitals located in the 50 States and the District of Columbia. Short-stay hospitals are defined as all general and specialty hospitals with patient stays of less than 30 days on the average. In 1980, this category included 177 psychiatric hospitals and 1 tuberculosis hospital (American Hospital Association, 1981). Hospitals operated by the Department of Defense, Veterans' Administration, and Indian Health Service are excluded, as are hospital units of such institutions as prisons. A sample of discharges is selected using discharge lists from the hospitals included in the NHDS sample. All discharges, including newborns, are eligible for selection except patients discharged from long-term or psychiatric care units of short-stay hospitals that maintain separate medical records—that is, hospitals that have decentralized medical record systems.

Information about sampled discharges is abstracted from medical records onto an abstract form (appendix I, figure I) by either staff of the hospital's medical records department or field staff of the Bureau of the Census. Medical information is coded centrally using the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) (U.S. Public Health Service and Health Care Financing Administration, 1980). In 1980, information was collected on a sample of approximately 224,000 discharges from 420 hospitals that participated in the NHDS.

In the GHMS, which was initiated in the mid-1950s, information is obtained on a 10-percent sample of discharges

from each hospital operated by the Ministry of Health and Social Welfare and the Ministry of Transportation. The few hospitals under the control of the Ministries of National Defense, Internal Affairs, and Justice are excluded. All discharges from 641 general hospitals are eligible to be sampled, except women with normal deliveries, healthy newborn infants, and patients discharged from psychiatric wards. Women with complicated deliveries or other conditions that lengthened their hospitalization, newborn infants with conditions that required treatment during hospitalization, and psychiatric patients discharged from other than psychiatric wards are in scope. In addition to discharges from general hospitals, neurologic patients discharged from 40 psychiatric hospitals and all patients discharged from 30 tuberculosis sanitariums are also in scope for the GHMS.

Nonmedical information about the patient is collected on an abstract form (appendix I, figures II and III) at the time of admission. Medical information is added to the form after discharge and coded by the ward physician using the ninth revision of the *Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death* (World Health Organization, 1977). In 1980, information was collected on approximately 364,000 discharges from the hospitals and sanitariums operated by the Ministry of Health and Social Welfare and the Ministry of Transportation. A more detailed description of the NHDS and the GHMS is contained in appendix I.

To improve the comparability of the two data sources, the 1980 NHDS data file was adjusted. All discharges with a single-listed diagnosis of normal delivery and all discharges with a single-listed newborn code were excluded from the file. Any discharge with a newborn code or with a normal delivery code *and* one or more secondary diagnoses remained in the file. No attempt was made to adjust for possible differences in the psychiatric patient populations covered by the two surveys.

Hospital use comparisons

According to the General Hospital Morbidity Study, an estimated 3.6 million inpatients were discharged from Polish hospitals during 1980. These patients were hospitalized for a total of 59.7 million days of inpatient care. The estimate from the National Hospital Discharge Survey was that 37.2 million patients were discharged in 1980. These patients used a total of 276.7 million patient care days.

Discharge rates

Table J shows discharge rates and percent distributions of discharges by age and sex for Poland and the United States. Overall, patients were discharged at a 62-percent higher rate from U.S. than from Polish hospitals in 1980. These higher U.S. discharge rates held across age groups, except for the group 5–14 years of age, and were particularly pronounced for the older age groups (figure 6). For example, the discharge

rate in the United States for the age group 85 years and over was four times the rate in Poland. In both countries, discharge rates were high for the group under 1 year of age, lowest for the age groups 1–4 and 5–14 years, and then generally increased with age. However, in Poland, the discharge rate was lower for the age group 85 years and over than for either patients 65–74 or those 75–84 years of age.

The discharge rate was higher for females than for males in both countries. For all ages, the difference in the rates for the two sexes was greater in the United States, but in both countries higher female rates were seen primarily for the three age groups encompassing the childbearing years, 15–44. In Poland, discharge rates for males were higher for all the age groups other than 15–44. In the United States, sex differences in discharge rates for the other age groups were generally not statistically significant.

Percent distributions of the number of discharges by age

Table J. Rate and percent distribution of inpatients discharged from hospitals by age, according to sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries]

Age	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 population						
All ages	102	165	97	144	107	184
Under 1 year	298	516	329	550	266	481
1–4 years	66	86	77	100	55	73
5–14 years	58	50	63	53	52	46
15–24 years	78	118	54	77	103	158
25–34 years	99	147	69	91	131	202
35–44 years	95	142	89	117	100	165
45–54 years	121	175	126	165	117	185
55–64 years	133	215	159	228	113	204
65–74 years	159	316	194	347	135	292
75–84 years	176	464	219	510	152	437
85 years and over	144	576	200	635	122	550
Percent distribution						
All ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 1 year	5.7	4.9	6.9	6.4	4.6	3.9
1–4 years	4.7	3.0	5.9	4.2	3.6	2.1
5–14 years	8.6	4.7	10.3	6.0	7.1	3.7
15–24 years	13.1	13.2	10.1	10.1	15.7	15.4
25–34 years	16.7	14.6	12.5	10.5	20.4	17.7
35–44 years	10.3	9.8	10.3	9.3	10.3	10.1
45–54 years	14.2	10.7	15.4	11.5	13.3	10.1
55–64 years	10.6	12.6	12.0	14.8	9.3	11.0
65–74 years	10.4	13.3	11.2	15.0	9.7	12.0
75–84 years	5.1	9.7	4.7	9.4	5.4	10.0
85 years and over	0.7	3.5	0.5	2.8	0.8	4.1

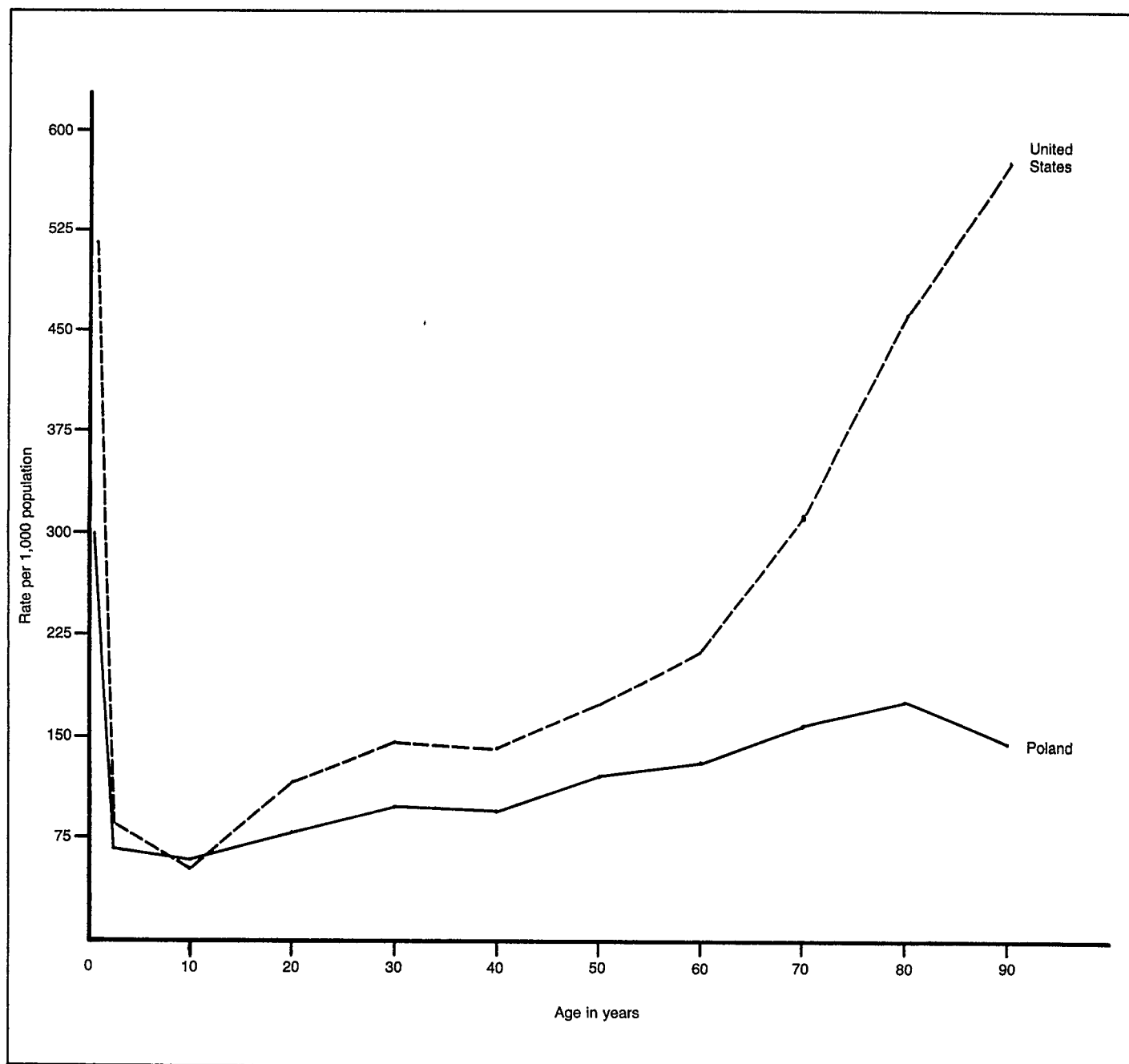


Figure 6. Discharge rates by age: Poland and the United States, 1980

were fairly similar in the two countries, with more than 60 percent of discharges for patients 15–64 years of age in both. Patients under 15 years of age constituted a smaller percent of the hospital population in the United States, approximately 13 percent, than in Poland, where they accounted for 19 percent. Patients 65 years of age and over composed a much larger percent of U.S. than of Polish discharges. Approximately 27 percent of the U.S. patient population was 65 years of age and over, compared with 16 percent of the patient population in Poland. Although the age composition of the total population does vary between the two countries (see figure 1), it does not account for these differences in patient population.

Table K presents ratios of U.S. discharge rates to Polish

discharge rates by age and sex. For each of the age groups 35 years and over, the ratios were significantly larger for females than for males, showing that the variation in discharge rates between the two countries was greater for females than for males. The largest difference in ratios by sex was for the age group 85 years and over, which resulted from the low discharge rate for Polish females in this age group.

Average lengths of stay

Average lengths of stay for inpatients discharged from Polish and U.S. hospitals and ratios of average stays in Poland to those in the United States are shown in table L by age and sex. For all patients, the average length of stay was

Table K. Ratio of discharge rates in the United States to discharge rates in Poland by age and sex, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries]

Age	Both sexes	Male	Female
All ages	1.6	1.5	1.7
Under 1 year	1.7	1.7	1.8
1-4 years	1.3	1.3	1.3
5-14 years	0.9	0.8	0.9
15-24 years	1.5	1.4	1.6
25-34 years	1.5	1.3	1.5
35-44 years	1.5	1.3	1.6
45-54 years	1.5	1.3	1.6
55-64 years	1.6	1.4	1.8
65-74 years	2.0	1.8	2.2
75-84 years	2.6	2.3	2.9
85 years and over	4.0	3.2	4.5

more than twice as long in Poland as in the United States. Longer Polish stays were found for every age group and for both sexes, although the magnitude of the differences varied by age (figure 7) and sex.

The relative differences in average stay, as measured by the ratios, were greatest for children 1-4 and 5-14 years of age. The stays of Polish children in these age groups were 3.5 to 3.7 times the stays of U.S. children. The smallest difference was for patients 85 years of age and over, whose stays were 70 percent longer in Polish than in U.S. hospitals. The relative differences in average stay were larger for males as a group than for females as a group, and the differences for males in the age groups 25-34, 35-44, and 45-54 years were significantly larger than for females in those age groups. However, the ratio was larger for females 85 years of age and over than for males in that age group.

In the United States, the shortest average lengths of stay were for children 1-4 and 5-14 years of age. Stays generally increased for the successive age groups, with the longest stays for the three age groups 65 years and over. In Poland, though, the shortest average lengths of stay were for the age groups 15-24 and 25-34 years. This was due to the

short average stays of the females in these age groups. Among Polish males, the average stay was shortest for patients 1-4 years of age. The longest average stays for males in Poland were for patients 65-74 years of age. Both the 65-74- and 75-84-year groups had the longest average stays for Polish females.

Rates of patient care days

Although patients in the United States were discharged from hospitals at a higher rate than were patients in Poland, their shorter average length of stay resulted in a lower rate of patient care days (discharge rate times average length of stay) for the United States. Patients in Poland used 37 percent more hospital care per person than did U.S. patients. As is shown in tables M and N, the higher Polish rates held for both sexes, but the difference was greater for males, who used 60 percent more care in Poland, than for females, who used 19 percent more care.

The rate of patient care days was higher for males than for females in Poland, but it was higher for females in the United States. Like discharge rates, U.S. rates of patient care days for females were higher for the three age groups in the childbearing years, 15-24, 25-34, and 35-44 years. In Poland, higher rates for males were found for every age group except 15-24 and 25-34 years, which were two of the three age groups in which females had higher discharge rates.

Besides sex differences, there were striking differences between the two countries in rates of patient care days by age (figure 8). Children used hospital care at a higher rate in Poland than in the United States. Polish rates of patient care days were nearly three times U.S. rates for the age group 1-4 years and more than four times U.S. rates for the group 5-14 years. On the other hand, patients in the two oldest age groups used more hospital care in the United States. The U.S. rate of patient care days was 35 percent higher for patients 75-84 years and more than twice the Polish rate for patients 85 years of age and over.

Table L. Average length of stay in days for inpatients discharged from hospitals in Poland and the United States, and ratio of average length of stay in Poland to average length of stay in the United States, by age and sex, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries]

Age	Both sexes			Male			Female		
	Poland	United States	Ratio	Poland	United States	Ratio	Poland	United States	Ratio
	Average length of stay in days			Average length of stay in days			Average length of stay in days		
All ages	16.4	7.4	2.2	18.1	7.6	2.4	15.0	7.3	2.1
Under 1 year	16.0	6.5	2.5	16.0	6.1	2.6	15.9	7.0	2.3
1-4 years	13.8	3.9	3.5	13.3	3.9	3.4	14.6	3.7	4.0
5-14 years	15.6	4.2	3.7	15.4	4.1	3.8	15.8	4.2	3.8
15-24 years	11.9	4.9	2.4	14.7	6.0	2.5	10.4	4.4	2.4
25-34 years	11.9	5.3	2.3	15.3	6.2	2.5	10.1	5.0	2.0
35-44 years	15.6	6.6	2.4	18.2	6.9	2.6	13.4	6.3	2.1
45-54 years	18.3	7.5	2.4	20.2	7.6	2.7	16.3	7.5	2.2
55-64 years	20.9	8.8	2.4	21.6	8.6	2.5	20.0	9.0	2.2
65-74 years	22.3	10.0	2.2	22.2	9.7	2.3	22.3	10.2	2.2
75-84 years	21.8	11.2	2.0	21.2	10.7	2.0	22.3	11.5	1.9
85 years and over	20.4	12.0	1.7	18.6	12.1	1.5	21.6	12.0	1.8

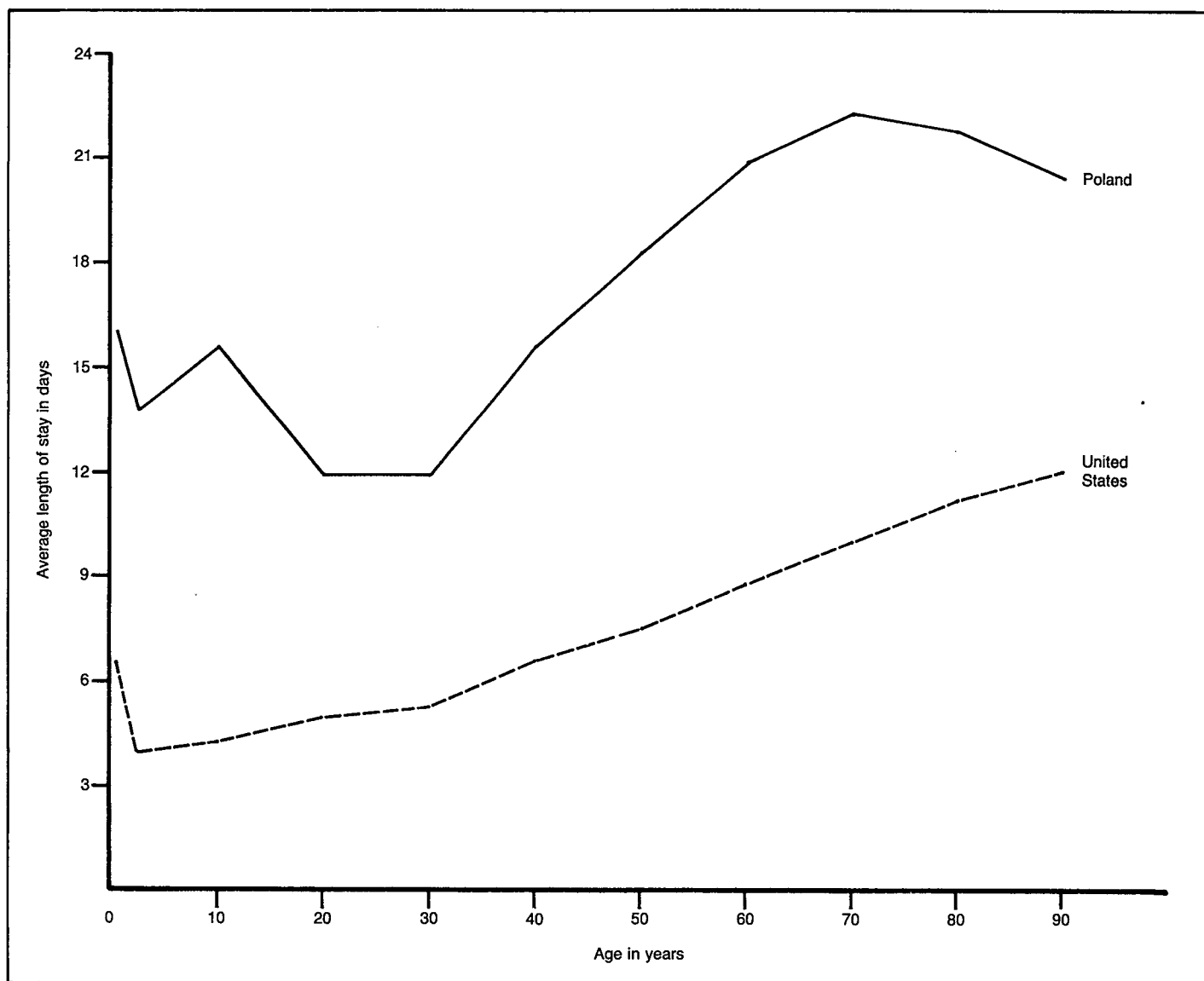


Figure 7. Average length of stay by age: Poland and the United States, 1980

Percent distributions of the number of days of care in each country also differed by age. The percent of patient care days was higher for each age group under 55 years of age in Poland but higher for each age group 55 years and over in the United States. These differences were especially great in four of the age groups: Children 1–4 and 5–14 years of age accounted for 12 percent of patient care days in Poland but only 4.2 percent in the United States. Patients aged 75–84 years and 85 years and over used 20.3 percent of patient care days in the United States but only 7.6 percent in Poland.

Diagnosis by age and sex

All ages

U.S. and Polish discharge rates are shown by sex for major diagnostic groups in table O. A detailed list of diagnoses within these groups is given in table 4. The leading diagnostic category in Poland was diseases of the respiratory system, followed by diseases of the circulatory and of the digestive systems and injury and poisoning. These four groups accounted for half of all discharges. In the United States, diseases of

the circulatory and digestive systems were the leading diagnostic categories. Together with diseases of the genitourinary system and injury and poisoning, these four groups accounted for nearly half of all U.S. discharges.

Diseases of the circulatory and of the digestive systems were leading categories for both males and females in the two countries. Injury and poisoning and respiratory diseases were also leading categories for males in both countries. Complications of pregnancy, childbirth, and the puerperium and diseases of the genitourinary system were also leading groups for females in both countries.

Discharge rates were higher in the United States than in Poland for most leading diagnostic categories (figure 9). There also were particularly large differences for three other categories. The U.S. discharge rate was more than eight times the Polish rate for certain conditions originating in the perinatal period, even though the death rate for this category was higher in Poland (see table 2). This difference in discharge rates is thought to result from incomplete reporting of perinatal conditions by Polish physicians in the General Hospital Morbidity Study. Likewise, the previously noted exclusion of

Table M. Rate and percent distribution of patient care days for inpatients discharged from hospitals by age, according to sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries]

Age	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 population						
All ages	1,678	1,227	1,759	1,100	1,601	1,345
Under 1 year	4,766	3,344	5,265	3,328	4,239	3,362
1-4 years	911	333	1,014	391	803	272
5-14 years	901	206	972	216	827	196
15-24 years	931	579	798	460	1,072	697
25-34 years	1,181	788	1,048	561	1,318	1,006
35-44 years	1,479	932	1,610	811	1,350	1,046
45-54 years	2,211	1,317	2,540	1,250	1,904	1,380
55-64 years	2,783	1,890	3,442	1,956	2,259	1,831
65-74 years	3,552	3,148	4,315	3,370	3,018	2,977
75-84 years	3,830	5,182	4,639	5,477	3,401	5,009
85 years and over	2,934	6,927	3,726	7,675	2,640	6,599
Percent distribution						
All ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 1 year	5.5	4.3	6.1	5.0	4.9	3.7
1-4 years	3.9	1.6	4.4	2.2	3.4	1.1
5-14 years	8.1	2.6	8.8	3.2	7.5	2.1
15-24 years	9.5	8.7	8.2	7.9	10.9	9.3
25-34 years	12.1	10.5	10.6	8.5	13.6	12.1
35-44 years	9.8	8.6	10.4	8.4	9.2	8.8
45-54 years	15.8	10.8	17.2	11.4	14.4	10.3
55-64 years	13.4	14.9	14.4	16.6	12.4	13.5
65-74 years	14.1	17.8	13.8	19.1	14.4	16.8
75-84 years	6.8	14.6	5.6	13.2	8.0	15.6
85 years and over	0.8	5.7	0.6	4.4	1.1	6.7

psychiatric patients from the Polish data probably accounts for the much higher discharge rates for mental disorders in the United States.

Discharge rates were also much higher in the United States, particularly for females, in the supplementary classification, factors influencing health status and contact with health service. This difference is associated primarily with the use of U.S. hospitals for contraceptive management, especially sterilization. One of two discharges in this category is for contraceptive management (ICD-9 code V25) in the United States, compared with 0.3 percent in Poland.

Table N. Ratio of the rate of patient care days in Poland to the rate in the United States, by age and sex, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries]

Age	Both sexes	Male	Female
All ages	1.4	1.6	1.2
Under 1 year	1.4	1.6	1.3
1-4 years	2.7	2.6	3.0
5-14 years	4.4	4.5	4.2
15-24 years	1.6	1.7	1.5
25-34 years	1.5	1.9	1.3
35-44 years	1.6	2.0	1.3
45-54 years	1.7	2.0	1.4
55-64 years	1.5	1.8	1.2
65-74 years	1.1	1.3	1.0
75-84 years	0.7	0.9	0.7
85 years and over	0.4	0.5	0.4

U.S.-Polish differences in discharge rates for males were not statistically significant for diseases of the respiratory system or for diseases of the skin and subcutaneous tissue. Discharge rates for females were higher for both categories in the United States.

Discharge rates for both males and females were higher in Poland in one category, infectious and parasitic diseases. Discharge rates in Poland for tuberculosis and hepatitis were more than nine times the rates in the United States. These two diagnoses represented 50 percent of discharges with an infectious or parasitic disease in Poland, but only 8 percent in the United States. One reason for this difference was that patients discharged from tuberculosis sanitariums were in scope for the Polish survey. In the United States, 10 of the 11 hospitals that specialized in the treatment of tuberculosis and other respiratory diseases in 1980 were long-stay institutions that were out of scope for NHDS. In addition, the death rate in Poland for tuberculosis was nine times that in the United States in 1980; further, hospitalization for viral hepatitis is mandatory in Poland.

Average lengths of stay by diagnostic category and sex are summarized in table P. Polish average stays were two to three times as long as those in the United States for most categories. The longest average length of stay in Poland, that for infectious and parasitic diseases, was 34.1 days—nearly five times the average U.S. stay for the category. Tuberculosis patients in the category stayed in Polish hospitals

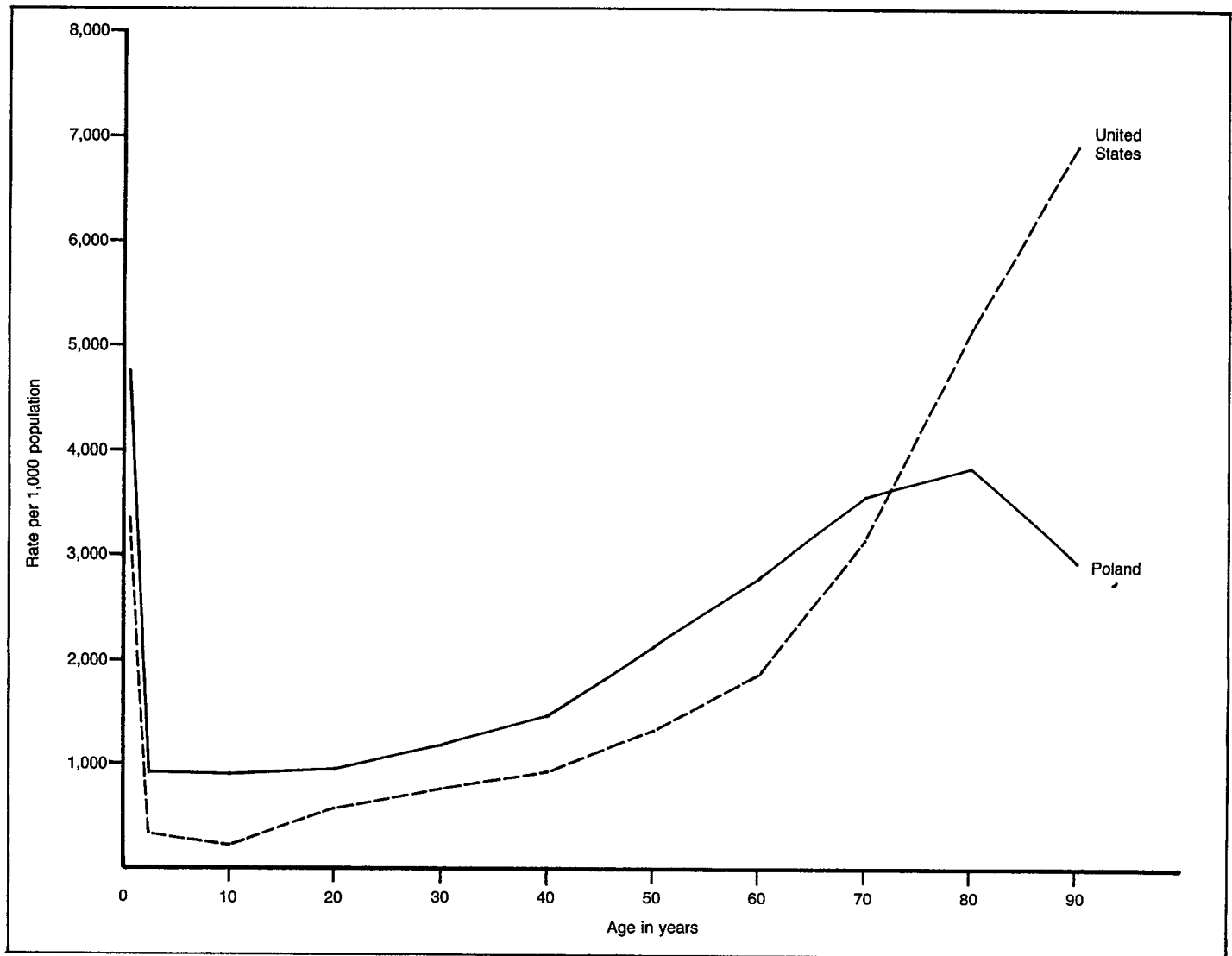


Figure 8. Rate of patient care days by age: Poland and the United States, 1980

an average of 76.0 days, nearly five times the average in the United States of 15.6 days. The Polish average stay for viral hepatitis of 30.2 days was nearly four times the U.S. average of 7.7 days.

Other categories with average lengths of stay of more than 20 days in Poland were neoplasms, diseases of the musculoskeletal system and connective tissue, and congenital anomalies. In the United States, only three categories had average lengths of stay of 10 days or more: mental disorders, neoplasms, and diseases of the circulatory system.

Average stays for mental disorders were similar in the United States and Poland. As previously noted, though, patients in psychiatric wards were excluded from the Polish data. In both countries, the shortest stays were for the supplementary classification and for complications of pregnancy, childbirth, and the puerperium. Even for these categories, average lengths of stay were about twice as long in Poland as in the United States.

Males stayed in the hospital an average of 3 days longer than did females in Poland, but in the United States, average lengths of stay did not differ significantly by sex. Even when complications of pregnancy, childbirth, and the puerperium

was excluded, the average length of stay remained shorter for females (16.9 days) than for males in Poland. When the pregnancy category was excluded, the average U.S. stay for females became 7.9 days, which was still not significantly different from the average stay for males.

Nevertheless, there were sex differences in lengths of stay for specific diagnostic categories. For example, in both countries males had longer average stays than did females for diseases of the genitourinary system, and males in Poland had stays an average of 7 days longer for infectious and parasitic diseases. Females in both countries had longer average stays for diseases of the musculoskeletal system and connective tissue. The stays of Polish females also were nearly 7 days longer than those of Polish males for congenital anomalies. U.S. females had significantly longer stays than U.S. males had for certain conditions originating in the perinatal period and injury and poisoning.

Rates of patient care days by diagnostic category and sex are shown in table Q. The highest rate in both countries was for diseases of the circulatory system. The circulatory diseases accounted for the most patient care days for both sexes in the United States and for females in Poland. Males

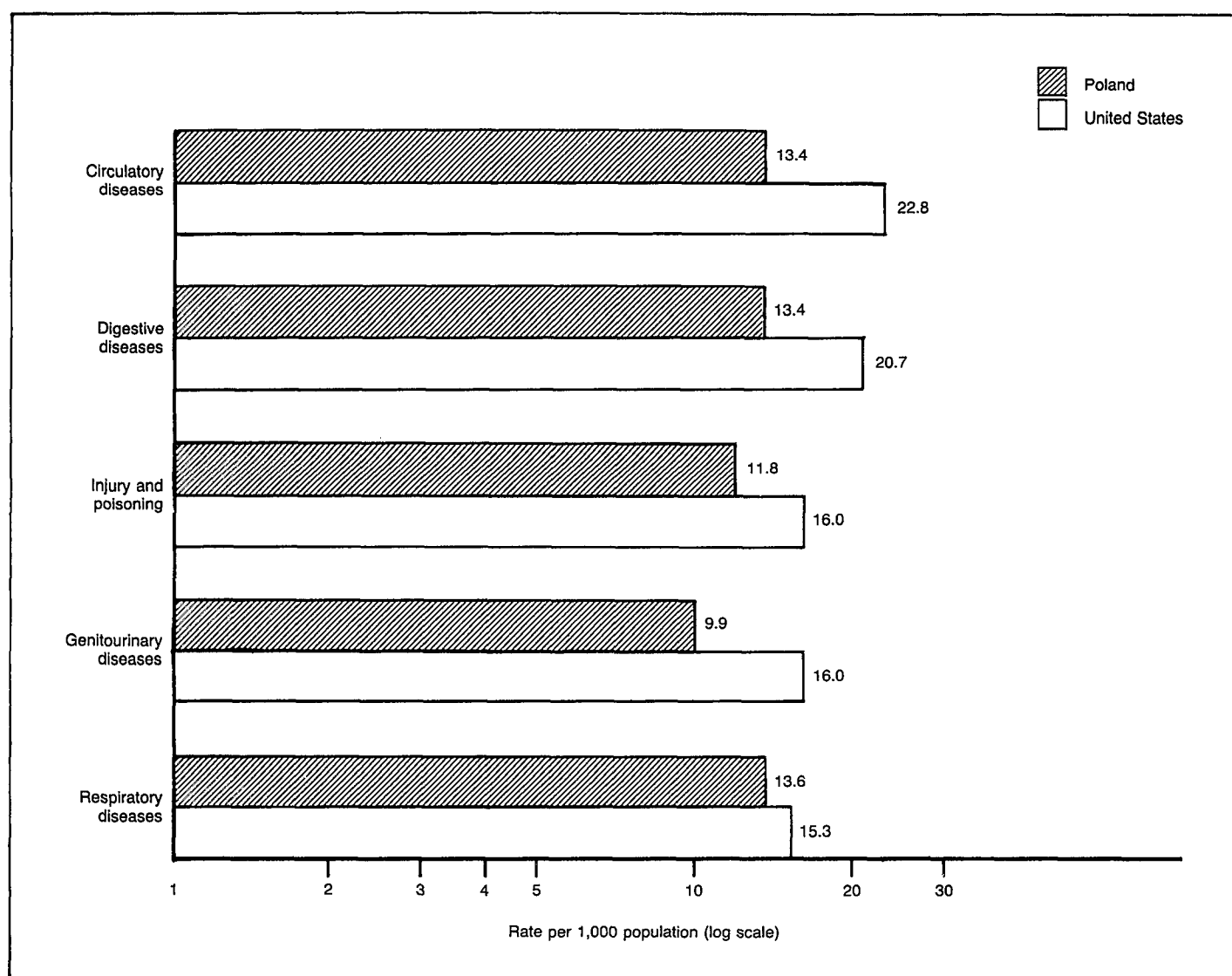


Figure 9. Discharge rates for leading diagnostic categories: Poland and the United States, 1980

in Poland spent the most days in the hospital for diseases of the respiratory system.

Because of the much longer stays in Polish hospitals, rates of patient care days were higher in Poland for most diagnostic categories. Notable exceptions were endocrine, nutritional, and metabolic diseases and immunity disorders; mental disorders; certain conditions originating in the perinatal period; and the supplementary classification. Discharge rates for these four diagnostic categories were considerably higher in the United States than in Poland, resulting in higher rates of patient care days as well.

More than half of patients discharged with endocrine, nutritional, and metabolic diseases and immunity disorders had had a diagnosis of diabetes mellitus in both countries. The death rate for diabetes was somewhat higher in the United States than in Poland (15.4 versus 12.5 per 100,000 population in 1980). This may at least partially explain the greater utilization of U.S. hospitals for the endocrine category. Possible reasons for the higher discharge rates for the latter three classes have already been discussed.

Under 1 year

Table R presents discharge rates for infants under 1 year of age in Poland and the United States by diagnostic category and sex. Additional diagnostic data on infants are shown in table 5. Hospitalized infants in Poland were most often treated for a disease of the respiratory system (figure 10). Infectious and parasitic diseases, certain conditions originating in the perinatal period, and diseases of the digestive system were also leading diagnostic categories in Poland. In the United States, half of infants hospitalized during their first year had diagnoses that fell into the category of certain conditions originating in the perinatal period. As in Poland, diseases of the respiratory system and digestive system also were leading categories. However, congenital anomalies, rather than infectious and parasitic diseases, was a leading cause for U.S. infants.

The overall discharge rate for children under 1 year of age was higher in the United States than in Poland, and higher U.S. rates were reported for most diagnostic categories.

Table O. Rate of discharge for inpatients by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries. Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 population						
All conditions	102.2	164.7	97.4	144.0	106.7	184.1
Infectious and parasitic diseases	001-139	5.3	2.9	6.2	2.9	4.5
Neoplasms	140-239	6.1	11.0	5.4	9.5	6.7
Endocrine, nutritional and metabolic diseases and immunity disorders	240-279	1.8	5.1	1.3	3.6	2.3
Diseases of the blood and blood-forming organs	280-289	0.6	1.5	0.6	1.3	0.7
Mental disorders	290-319	1.1	7.5	1.0	8.1	1.1
Diseases of the nervous system and sense organs	320-389	4.8	7.8	5.3	7.3	4.4
Diseases of the circulatory system	390-459	13.4	22.8	14.7	23.8	12.2
Diseases of the respiratory system	460-519	13.6	15.3	16.4	16.2	10.9
Diseases of the digestive system	520-579	13.4	20.7	14.1	20.0	12.7
Diseases of the genitourinary system	580-629	9.9	16.0	5.5	10.1	14.1
Complications of pregnancy, childbirth and the puerperium	630-676	10.5	13.0	...	...	20.5
Diseases of the skin and subcutaneous tissue	680-709	2.6	2.7	2.9	2.7	2.2
Diseases of the musculoskeletal system and connective tissue	710-739	3.5	10.0	3.5	8.9	3.5
Congenital anomalies	740-759	1.0	1.9	1.1	1.9	0.9
Certain conditions originating in the perinatal period	760-779	0.5	4.1	0.6	4.5	0.5
Symptoms, signs and ill-defined conditions	780-799	1.6	2.9	1.7	2.8	1.6
Injury and poisoning	800-999	11.8	16.0	16.9	18.6	6.9
Supplementary classification	V01-V82	0.8	3.6	0.5	1.7	1.0

Table P. Average length of stay for discharged inpatients by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries. Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Average length of stay in days						
All conditions	16.4	7.4	18.1	7.6	15.0	7.3
Infectious and parasitic diseases	001-139	34.1	6.9	37.1	6.6	30.0
Neoplasms	140-239	22.5	10.5	24.4	11.1	21.0
Endocrine, nutritional and metabolic diseases and immunity disorders	240-279	19.1	9.6	19.4	9.3	19.0
Diseases of the blood and blood-forming organs	280-289	16.8	7.2	15.1	6.5	18.2
Mental disorders	290-319	12.3	11.6	12.4	11.0	12.3
Diseases of the nervous system and sense organs	320-389	19.6	5.5	19.2	5.5	20.0
Diseases of the circulatory system	390-459	18.8	10.0	18.7	9.6	18.9
Diseases of the respiratory system	460-519	17.7	6.3	18.3	6.3	16.8
Diseases of the digestive system	520-579	14.3	7.0	14.0	6.5	14.6
Diseases of the genitourinary system	580-629	10.4	5.6	13.1	6.4	9.4
Complications of pregnancy, childbirth and the puerperium	630-676	7.1	3.8	...	...	7.1
Diseases of the skin and subcutaneous tissue	680-709	19.1	8.0	17.6	7.6	20.9
Diseases of the musculoskeletal system and connective tissue	710-739	24.8	8.3	23.0	7.6	26.5
Congenital anomalies	740-759	22.3	6.2	19.2	6.0	25.9
Certain conditions originating in the perinatal period	760-779	14.0	7.8	13.6	7.1	14.1
Symptoms, signs and ill-defined conditions	780-799	9.6	4.5	9.6	4.4	9.6
Injury and poisoning	800-999	13.5	7.7	13.3	6.9	14.0
Supplementary classification	V01-V82	8.8	3.4	10.4	4.2	8.0

There were particularly large differences in discharge rates for conditions originating in the perinatal period, diseases of the circulatory system, and diseases of the musculoskeletal system. U.S. discharge rates were seven to nine times Polish rates for these categories.

Part of the difference in the rates for perinatal conditions was due to differences in data collection procedures in the two countries. All newborn infants were sampled for the U.S. survey, and abstracts for healthy newborns were excluded when the data were tabulated. Only sick newborn infants

were reported in Poland. When the Polish survey was revised in 1985 to sample all newborn infants without regard to their health status, the rate of reported perinatal conditions nearly doubled. However, even doubling the 1980 Polish rate would not bring it close to the U.S. rate, and the 1980 death rate for perinatal conditions was higher in Poland (915.8 per 100,000 live births) than in the United States (629.7 per 100,000 live births), suggesting that U.S. physicians report more minor perinatal conditions for newborn infants than do Polish physicians.

Table Q. Rate of patient care days for discharged inpatients by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries. Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 population						
All conditions	1,677.6	1,226.9	1,758.8	1,099.9	1,600.5	1,345.4
Infectious and parasitic diseases 001-139	181.9	20.1	231.7	19.0	134.6	21.2
Neoplasms 140-239	136.9	115.4	132.7	104.7	140.8	125.4
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	34.5	48.7	25.2	34.0	43.3	62.6
Diseases of the blood and blood-forming organs 280-289	10.1	10.8	8.3	8.7	11.8	12.8
Mental disorders 290-319	12.9	86.8	12.0	89.2	13.8	84.7
Diseases of the nervous system and sense organs 320-389	93.9	42.7	100.7	40.4	87.3	44.9
Diseases of the circulatory system 390-459	251.7	228.2	274.8	229.0	229.7	227.4
Diseases of the respiratory system 460-519	240.4	96.2	300.1	102.1	183.7	90.7
Diseases of the digestive system 520-579	191.4	143.6	196.7	129.4	186.3	156.9
Diseases of the genitourinary system 580-629	102.4	89.0	71.4	64.3	131.7	112.2
Complications of pregnancy, childbirth and the puerperium 630-676	75.0	49.3	...	...	146.2	95.2
Diseases of the skin and subcutaneous tissue 680-709	48.8	21.4	50.8	20.3	46.8	22.4
Diseases of the musculoskeletal system and connective tissue 710-739	87.1	82.9	80.6	67.9	93.3	96.9
Congenital anomalies 740-759	22.1	11.7	20.4	11.6	23.8	11.8
Certain conditions originating in the perinatal period 760-779	7.4	31.9	7.5	32.2	7.2	31.7
Symptoms, signs and ill-defined conditions 780-799	15.6	13.2	15.9	12.1	15.2	14.3
Injury and poisoning 800-999	158.8	122.6	224.1	128.1	96.7	117.6
Supplementary classification V01-V82	6.9	12.2	5.5	7.1	8.2	17.0

Table R. Rate of discharge for inpatients under 1 year of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants (codes V30-V39). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 live births						
All conditions	298.3	506.8	328.8	538.5	266.0	473.3
Infectious and parasitic diseases 001-139	49.2	19.7	53.9	19.4	44.2	19.9
Neoplasms 140-239	1.2	5.1	1.1	5.4	1.4	*4.8
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	2.2	4.2	2.4	*4.5	2.0	*3.8
Diseases of the blood and blood-forming organs 280-289	3.5	*2.0	3.7	*	3.3	*
Mental disorders 290-319	*	*	*	*	*	*
Diseases of the nervous system and sense organs 320-389	17.2	21.4	18.7	23.0	15.7	19.7
Diseases of the circulatory system 390-459	0.9	8.0	1.1	6.8	0.8	9.2
Diseases of the respiratory system 460-519	136.2	59.6	156.9	71.4	114.3	47.2
Diseases of the digestive system 520-579	23.7	43.6	27.8	50.9	19.4	36.0
Diseases of the genitourinary system 580-629	4.8	5.7	3.6	6.8	6.1	*4.4
Complications of pregnancy, childbirth and the puerperium 630-676	...	...	...	...	...	...
Diseases of the skin and subcutaneous tissue 680-709	6.1	5.1	6.1	*4.7	6.1	*5.4
Diseases of the musculoskeletal system and connective tissue 710-739	0.5	3.5	0.5	*	0.6	*4.6
Congenital anomalies 740-759	13.3	41.5	13.3	42.1	13.2	40.7
Certain conditions originating in the perinatal period 760-779	27.2	254.9	27.0	265.0	27.4	244.2
Symptoms, signs and ill-defined conditions 780-799	*3.4	13.5	3.3	13.6	3.5	13.4
Injury and poisoning 800-999	5.6	10.1	6.5	10.3	4.6	9.9
Supplementary classification V01-V82	3.1	8.0	2.8	8.3	3.4	7.7

It is not clear why U.S. discharge rates are substantially higher than are Polish rates for diseases of the circulatory and musculoskeletal systems. However, neither is a very frequent cause of hospitalization for infants under 1 year of age in either country.

Polish discharge rates were more than double U.S. rates for infectious and parasitic diseases and diseases of the respiratory system. Intestinal infectious diseases accounted for more than 85 percent of Polish discharges in the infectious and

parasitic category, and the Polish discharge rate for these diseases was more than seven times the U.S. rate. Among the respiratory diseases, the Polish discharge rate was 4.7 times the U.S. rate for bronchitis and emphysema and 4 times the U.S. rate for pneumonia. The infant mortality rates for these conditions were also considerably higher in Poland than in the United States.

Differences in discharge rates for males and females under 1 year of age were generally not statistically significant in

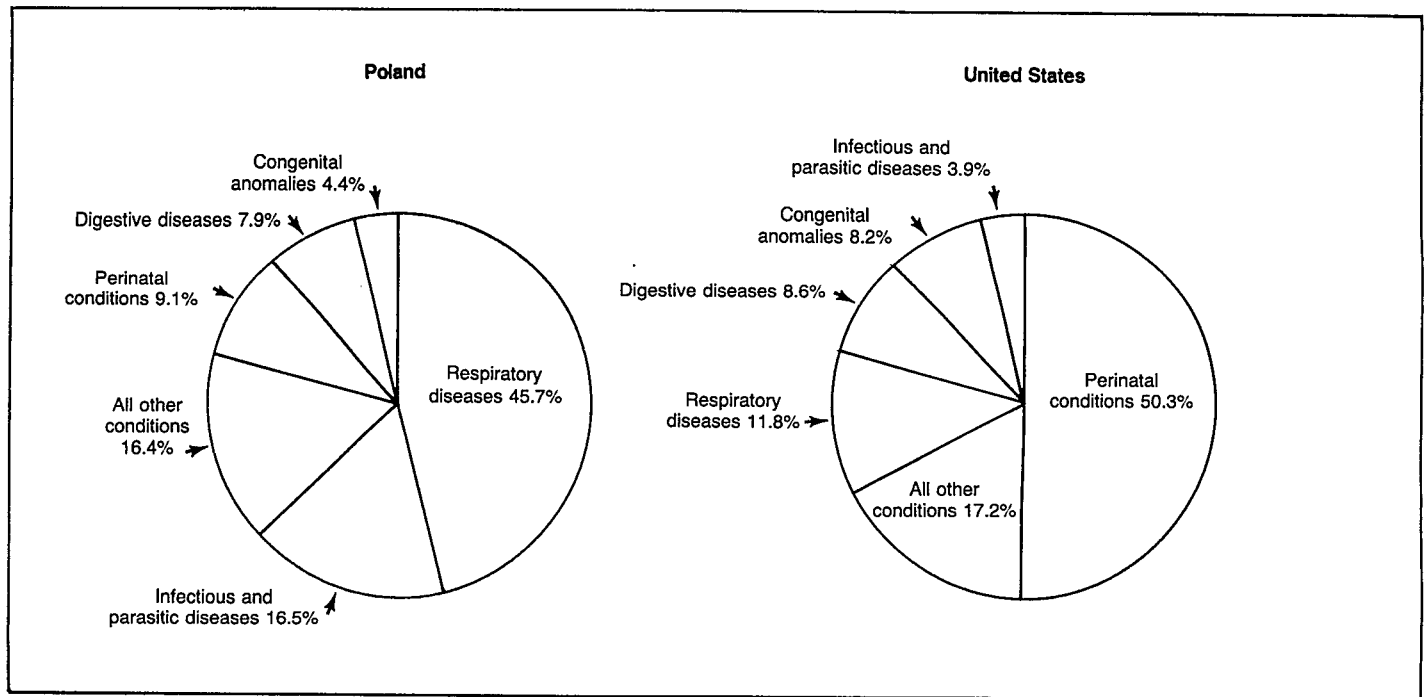


Figure 10. Percent distribution of patients under 1 year of age, excluding healthy newborn infants, discharged from hospitals, by diagnostic category: Poland and the United States, 1980

the United States. Only males had significantly higher rates for diseases of the respiratory and digestive systems. In Poland, males under 1 year had higher discharge rates than females had for these two diagnostic categories and for infectious and parasitic diseases, diseases of the nervous system and sense organs, and injury and poisoning. Polish females had a higher discharge rate for diseases of the genitourinary system, primarily because of their higher rate for diseases of the urinary system.

Average lengths of stay for children under 1 year of age are shown by diagnostic category and sex in table S. Comparatively long stays for Polish infants were evident for both sexes in all diagnostic categories. The differences ranged from stays 3.4 days longer for Polish males with a diagnosis in the supplementary classification to stays 23 days longer for Polish females with diseases of the circulatory system. It is not clear why the average stays were so much longer in Poland, but it may reflect poorer health of Polish infants. The infant mortality rate in Poland was nearly twice the U.S. rate (21.3 versus 12.6 per 1,000 live births) during 1980.

Circulatory diseases and endocrine, nutritional, and metabolic diseases and immunity disorders required longer-than-average stays for children under 1 year of age in both countries. Hospitalizations for the supplementary classification and for symptoms, signs, and ill-defined conditions were among the shortest in both countries; however, patterns of average lengths of stay were not similar for all the diagnostic categories. For example, stays for diseases of the genitourinary system were relatively long in Poland and relatively short in the United States. Conversely, certain conditions originating in the perinatal period required relatively long stays in the United States but relatively short stays in Poland.

Because of the long lengths of stay for Polish infants, they used more patient care days per person than did U.S. infants (table T). Substantially higher rates of patient care days were seen in Poland for two diagnostic categories, diseases of the respiratory system and infectious and parasitic diseases. These were the categories for which Polish infants also had higher discharge rates. Within the categories, diagnoses for which there were large differences in discharge rates were also ones for which large differences existed in rates of patient care days, namely pneumonia, bronchitis, and emphysema and infectious intestinal diseases. Rates of patient care days in Poland for infants with these diagnoses were 13 to 26 times rates in the United States.

Rates of patient care days were higher in the United States for certain conditions originating in the perinatal period and diseases of the circulatory system. The reasons for the difference in rates for perinatal conditions were discussed previously. The greater use of hospitals for infants with diseases of the circulatory system may reflect the use of more advanced technology for the treatment of pediatric heart diseases in the United States.

1-14 years

The leading cause of hospitalization for children 1-14 years of age in both Poland and the United States was diseases of the respiratory system (table U). The specific respiratory diseases responsible for the most discharges varied between the two countries (table 6 and figure 11). Polish children were hospitalized at a higher rate for acute respiratory diseases, pneumonia, and bronchitis and emphysema. U.S. children were more often hospitalized for chronic diseases of the tonsils and adenoids and for asthma.

Table S. Average length of stay for discharged inpatients under 1 year of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants (codes V30-V39). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Average length of stay in days						
All conditions	16.0	6.5	16.0	6.1	15.9	7.0
Infectious and parasitic diseases 001-139	17.8	5.1	17.7	5.1	18.0	5.2
Neoplasms 140-239	20.2	6.2	22.3	5.3	18.5	*7.3
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	24.3	9.3	26.1	*8.3	22.0	*10.5
Diseases of the blood and blood-forming organs 280-289	10.9	*6.6	12.2	*	9.3	*
Mental disorders 290-319	27.9	*	32.9	*	18.3	*
Diseases of the nervous system and sense organs 320-389	15.9	5.1	15.7	5.4	16.2	4.7
Diseases of the circulatory system 390-459	23.1	7.4	18.1	7.6	30.3	7.3
Diseases of the respiratory system 460-519	16.1	4.8	16.4	4.9	15.6	4.7
Diseases of the digestive system 520-579	13.2	5.0	13.0	4.7	13.4	5.6
Diseases of the genitourinary system 580-629	23.5	4.3	22.3	3.7	24.3	5.2
Complications of pregnancy, childbirth and the puerperium 630-676	...	...	...	...	...	...
Diseases of the skin and subcutaneous tissue 680-709	11.0	4.7	11.2	*4.4	10.7	*5.0
Diseases of the musculoskeletal system and connective tissue 710-739	24.5	5.2	31.6	*	17.3	*4.8
Congenital anomalies 740-759	20.9	5.7	20.6	5.6	21.2	5.8
Certain conditions originating in the perinatal period 760-779	13.9	7.7	13.6	7.1	14.3	8.5
Symptoms, signs and ill-defined conditions 780-799	9.9	3.9	9.7	4.0	10.1	3.8
Injury and poisoning 800-999	11.6	6.0	10.9	4.8	12.5	7.4
Supplementary classification V01-V82	8.4	3.4	7.1	3.7	9.6	3.1

Table T. Rate of patient care days for discharged inpatients under 1 year of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants (codes V30-V39). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 live births						
All conditions	4,766.1	3,284.8	5,265.2	3,260.1	4,238.9	3,310.7
Infectious and parasitic diseases 001-139	877.8	100.9	954.2	99.2	797.1	102.8
Neoplasms 140-239	24.5	31.7	23.8	28.8	25.3	*34.8
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	53.7	38.9	63.2	*37.9	43.8	*40.0
Diseases of the blood and blood-forming organs 280-289	37.8	*12.9	44.5	*	30.7	*
Mental disorders 290-319	*	*	*	*	*	*
Diseases of the nervous system and sense organs 320-389	274.3	108.8	293.0	124.0	254.6	92.9
Diseases of the circulatory system 390-459	21.7	59.6	19.4	51.8	24.2	67.8
Diseases of the respiratory system 460-519	2,186.3	288.4	2,569.0	352.7	1,782.0	220.7
Diseases of the digestive system 520-579	312.0	219.9	361.0	237.9	260.2	200.9
Diseases of the genitourinary system 580-629	113.5	24.2	81.0	25.2	147.9	*23.1
Complications of pregnancy, childbirth and the puerperium 630-676	...	...	...	...	...	...
Diseases of the skin and subcutaneous tissue 680-709	66.9	23.7	68.3	*20.6	65.4	*27.0
Diseases of the musculoskeletal system and connective tissue 710-739	13.0	18.4	16.1	*	9.7	*21.8
Congenital anomalies 740-759	277.6	235.2	275.2	235.0	280.1	235.4
Certain conditions originating in the perinatal period 760-779	378.4	1,974.6	367.7	1,873.2	389.7	2,081.5
Symptoms, signs and ill-defined conditions 780-799	33.5	53.0	31.7	54.5	35.5	51.3
Injury and poisoning 800-999	64.7	61.2	71.2	49.5	57.7	73.5
Supplementary classification V01-V82	26.0	27.4	20.1	30.8	32.2	23.8

Two other leading diagnostic categories in both countries were injury and poisoning and diseases of the digestive system. The major injury and poisoning diagnosis for both U.S. and Polish children was fractures. Among the other diagnoses, the discharge rate was higher in the United States for intracranial injury excluding skull fracture; but a higher rate was reported in Poland for burns. In the digestive disease category, discharge rates were similar in the two countries for hernia, but Polish children were more often hospitalized for appendicitis and U.S. children for noninfective enteritis and colitis.

The fourth leading diagnostic category for children 1-14 years of age in Poland was infectious and parasitic diseases. The Polish discharge rate was more than twice the U.S. rate for this category. Diseases of the nervous system and sense organs was one of the leading diagnostic groups for children in the United States. The U.S. discharge rate was 67 percent higher for the category as a whole, more than four times the Polish rate for diseases of the ear and mastoid process.

Other categories for which discharge rates were higher in Poland were diseases of the circulatory system and diseases

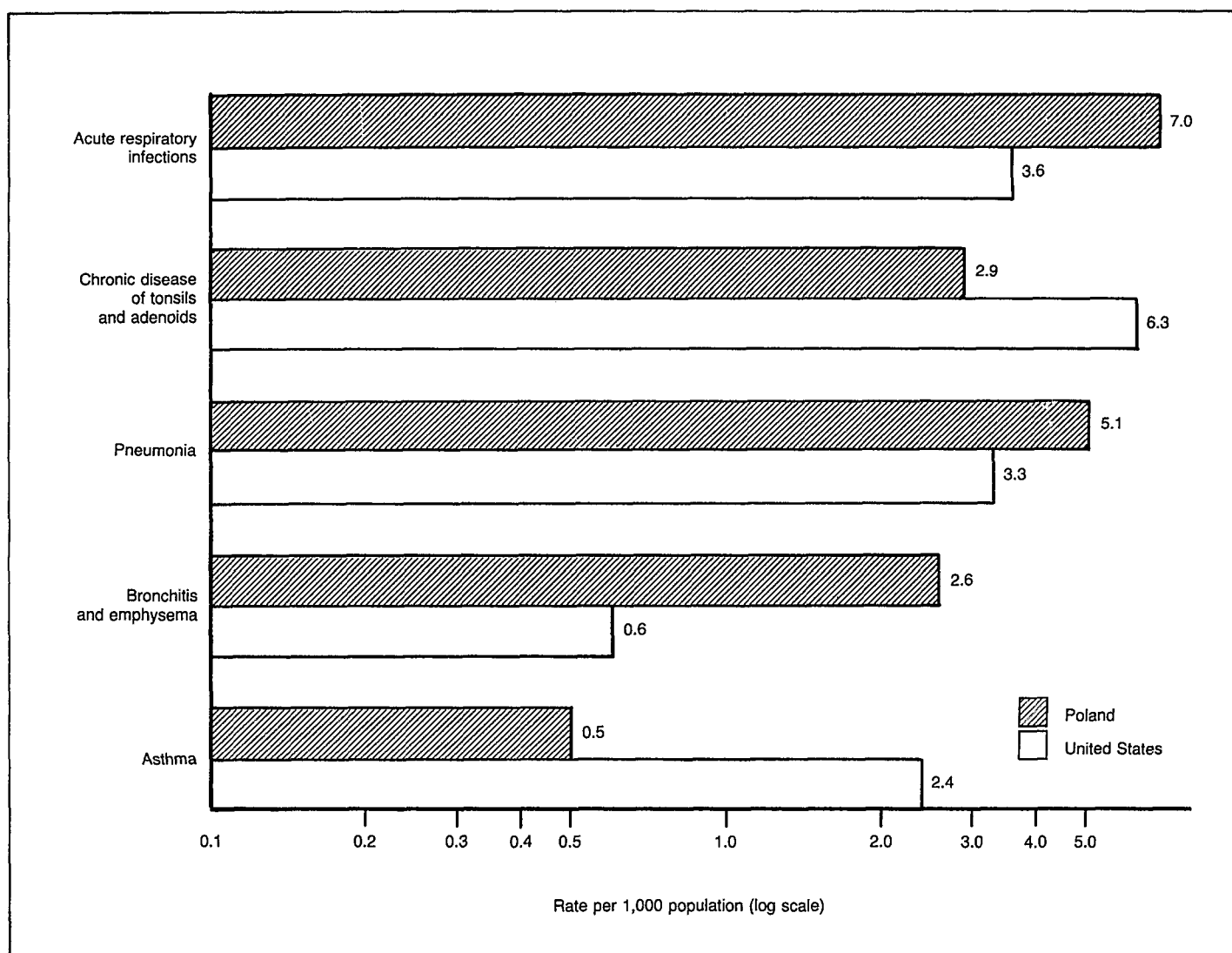


Figure 11. Discharge rates for children 1–14 years of age for selected diseases of the respiratory system: Poland and the United States, 1980

of the skin and subcutaneous tissue. In the circulatory category, half of Polish discharges were for acute rheumatic fever and chronic rheumatic heart disease, which accounted for very few children's discharges in the United States. U.S. discharge rates were higher for endocrine, nutritional, and metabolic diseases and immunity disorders; diseases of the blood and blood-forming organs; mental disorders; and the supplementary category. All six of these diagnostic categories together accounted for only about 7 percent of children's discharges in Poland and about 9 percent in the United States.

In fact, despite all these variations in rates for categories and specific conditions, total discharge rates for children 1–14 years of age in Poland and the United States did not differ significantly. This contrasts with higher U.S. discharge rates for the other age groups.

Males 1–14 years of age in Poland were discharged at a higher rate than were females, and they had higher rates for all four of the leading diagnostic categories. It should be noted that the discharge rate for females was higher for diseases of the genitourinary system. As was the case for

patients under 1 year of age, this can be attributed to a higher female rate for diseases of the urinary system.

Most of the differences in discharge rates by sex for the United States were not statistically significant, but U.S. males, like Polish males, had a higher rate of injury and poisoning. In both countries, more males than females were hospitalized for fractures, intracranial injuries, and lacerations.

The average length of a hospital stay for children 1–14 years of age in Poland was 3.8 times that in the United States, a difference of 11 days (table W). Stays were longer in Poland for both males and females and for every diagnostic category except complications of pregnancy, childbirth, and the puerperium.

The Polish average length of stay was more than seven times the U.S. average stay for diseases of the nervous system and sense organs. Within this category, the Polish average stay was seven times that in the United States for diseases of the ear and mastoid process, nearly nine times the U.S. average for diseases of the eye, and nearly four times the U.S. average for disorders of the central nervous system.

Table U. Rate of discharge for inpatients 1–14 years of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 population						
All conditions	60.5	59.6	67.4	65.4	53.2	53.4
Infectious and parasitic diseases 001–139	5.5	2.6	5.9	2.9	5.0	2.3
Neoplasms 140–239	1.1	1.3	1.2	1.2	1.0	1.4
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	0.5	1.0	0.5	1.0	0.5	1.1
Diseases of the blood and blood-forming organs 280–289	0.6	1.4	0.8	1.5	0.5	1.2
Mental disorders 290–319	0.4	0.9	0.4	0.8	0.4	1.0
Diseases of the nervous system and sense organs 320–389	3.6	6.0	3.9	6.9	3.2	5.1
Diseases of the circulatory system 390–459	0.8	0.4	0.8	0.5	0.8	*0.3
Diseases of the respiratory system 460–519	19.4	17.2	22.0	18.4	16.7	16.0
Diseases of the digestive system 520–579	8.0	7.7	9.1	8.7	6.9	6.6
Diseases of the genitourinary system 580–629	3.3	3.3	2.6	3.4	4.1	3.3
Complications of pregnancy, childbirth and the puerperium 630–676	0.0	0.4	...	...	0.0	0.8
Diseases of the skin and subcutaneous tissue 680–709	1.8	1.3	2.0	1.5	1.6	1.1
Diseases of the musculoskeletal system and connective tissue 710–739	1.3	1.4	1.4	1.4	1.3	1.5
Congenital anomalies 740–759	2.4	2.5	2.6	3.0	2.3	2.1
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	2.3	1.9	2.4	1.9	2.3	1.9
Injury and poisoning 800–999	9.0	9.4	11.4	11.4	6.4	7.2
Supplementary classification V01–V82	0.4	0.7	0.4	0.8	0.3	0.5

Table W. Average length of stay for discharged inpatients 1–14 years of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Average length of stay in days						
All conditions	15.0	4.0	14.6	4.0	15.4	4.1
Infectious and parasitic diseases 001–139	19.3	3.9	18.3	4.0	20.5	3.8
Neoplasms 140–239	19.4	6.1	20.4	7.4	18.0	4.8
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	18.6	6.0	20.2	5.6	17.3	6.3
Diseases of the blood and blood-forming organs 280–289	13.6	3.9	12.7	4.2	14.9	3.6
Mental disorders 290–319	21.3	13.9	23.1	12.4	19.3	15.2
Diseases of the nervous system and sense organs 320–389	21.3	3.0	20.4	2.9	22.3	3.0
Diseases of the circulatory system 390–459	23.6	7.6	22.4	7.4	25.1	*8.0
Diseases of the respiratory system 460–519	15.0	3.2	15.7	3.3	14.2	3.0
Diseases of the digestive system 520–579	9.5	3.5	9.5	3.3	9.5	3.7
Diseases of the genitourinary system 580–629	15.5	3.6	14.2	3.4	16.3	3.7
Complications of pregnancy, childbirth and the puerperium 630–676	4.3	7.6	...	...	4.3	7.6
Diseases of the skin and subcutaneous tissue 680–709	12.2	4.3	11.6	4.5	13.0	4.1
Diseases of the musculoskeletal system and connective tissue 710–739	27.6	6.8	26.7	7.1	28.4	6.6
Congenital anomalies 740–759	23.1	4.9	18.5	4.5	28.6	5.5
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	8.4	3.2	8.8	3.2	8.0	3.2
Injury and poisoning 800–999	10.7	4.7	10.6	4.8	10.8	4.5
Supplementary classification V01–V82	18.2	2.9	18.3	3.0	18.0	2.8

Another large difference, a Polish average length of stay six times that in the United States, was found for the supplementary classification. The length of stay for this category was longer than the average for all diagnoses in Poland but shorter than the average in the United States.

Longer than average lengths of stay were reported in both countries for mental disorders; diseases of the circulatory system; diseases of the musculoskeletal system and connective tissue; neoplasms; and endocrine, nutritional and metabolic

diseases and immunity disorders. Stays were also longer than average in Poland for congenital anomalies and infectious and parasitic diseases, the latter attributable to average stays of 36.8 days for hepatitis and 72.9 days for tuberculosis. Shorter than average stays were reported in both countries for symptoms, signs, and ill-defined conditions.

The diagnostic categories that accounted for the most patient care days for children 1–14 years of age were generally the same as the leading discharge categories (table Y). In

Table Y. Rate of patient care days for discharged inpatients 1–14 years of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 population						
All conditions	904.4	240.3	985.5	263.0	819.6	216.6
Infectious and parasitic diseases 001–139	105.5	10.1	108.1	11.4	102.8	8.7
Neoplasms 140–239	20.6	7.8	23.5	9.0	17.5	6.5
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	9.5	6.3	10.1	5.6	8.8	7.0
Diseases of the blood and blood-forming organs 280–289	8.7	5.3	9.8	6.3	7.6	4.3
Mental disorders 290–319	8.5	12.8	9.0	10.3	7.9	15.4
Diseases of the nervous system and sense organs 320–389	76.2	17.9	80.4	20.4	71.7	15.3
Diseases of the circulatory system 390–459	18.4	3.3	18.1	3.8	18.8	*2.7
Diseases of the respiratory system 460–519	292.2	54.8	345.0	61.6	237.0	47.7
Diseases of the digestive system 520–579	76.1	27.0	86.3	29.1	65.4	24.7
Diseases of the genitourinary system 580–629	51.4	11.8	36.2	11.6	67.2	12.1
Complications of pregnancy, childbirth and the puerperium 630–676	0.1	3.0	...	...	0.2	6.2
Diseases of the skin and subcutaneous tissue 680–709	22.1	5.7	23.0	6.9	21.1	4.5
Diseases of the musculoskeletal system and connective tissue 710–739	37.0	9.8	38.5	9.8	35.5	9.8
Congenital anomalies 740–759	56.1	12.4	48.0	13.3	64.7	11.3
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	19.5	6.1	20.9	6.1	18.1	6.1
Injury and poisoning 800–999	95.8	44.1	121.2	55.0	69.1	32.6
Supplementary classification V01–V82	6.7	2.0	7.3	2.5	6.1	1.4

the United States, diseases of the respiratory system, injury and poisoning, and diseases of the digestive system were responsible for 52 percent of children's hospital days. In Poland, diseases of the respiratory system alone accounted for a third of children's patient care days. Infectious and parasitic diseases and injury and poisoning followed in importance, and together these three leading diagnostic categories accounted for 55 percent of hospital days for Polish children 1–14 years of age.

Rates of patient care days were higher in Poland for almost all diagnostic categories. Two exceptions were mental disorders and complications of pregnancy, childbirth, and the puerperium. The higher U.S. rate for the pregnancy category is probably due to the high incidence of teenage pregnancies in the United States and to the greater incidence of complications in the very early reproductive years (NCHS 1980b, 1984a).

The Polish rate of patient care days was 10 times the U.S. rate for infectious and parasitic diseases and more than 5 times the U.S. rate for diseases of the circulatory system. For both categories, discharge rates were higher and average lengths of stay longer in Poland. The Polish rate of patient care days for diseases of the respiratory system was five times the U.S. rate because of longer average stays. Discharge rates for respiratory diseases did not differ significantly between the two countries. Within the respiratory disease category, the Polish rate of patient care days for bronchitis and emphysema was 37 times the U.S. rate. Polish patients with bronchitis and emphysema had an average length of stay eight times the U.S. average, and they were discharged at a rate four times that in the United States.

15–44 years

Complications of pregnancy, childbirth, and the puerperium was the leading discharge diagnosis for patients 15–44 years of age in both Poland and the United States (table Z). Although normal deliveries were excluded, one in every five U.S. discharges and one in every four Polish discharges for this age group were related to childbearing. The other leading diagnostic categories for females in both countries were diseases of the genitourinary system and diseases of the digestive system.

The leading diagnostic category for males 15–44 years of age in both countries was injury and poisoning. Diseases of the digestive system was also a leading diagnosis for males in both countries, as it was for females. Other leading diagnostic categories for males in the United States were mental disorders and diseases of the musculoskeletal system and connective tissue. In Poland, diseases of the respiratory and circulatory systems were leading diagnostic categories for males.

Discharge rates for patients 15–44 years of age were higher in the United States for most diagnostic categories. One of the largest differences was for diseases of the musculoskeletal system and connective tissue. The U.S. rate for this category was 3.6 times the Polish rate. Within this category (table 7), an especially large difference was found in the discharge rates for rheumatism, the U.S. rate being more than five times the Polish rate (figure 12). Other diagnostic categories with notably higher rates in the United States were congenital anomalies; diseases of the blood and blood-forming organs; and endocrine, nutritional and metabolic diseases and immunity disorders. Within this last class, the U.S. discharge rate for diabetes mellitus was 2.6 times the rate in Poland.

Table Z. Rate of discharge for inpatients 15–44 years of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 population						
All conditions	90.1	134.0	67.8	91.5	112.9	175.1
Infectious and parasitic diseases 001–139	3.7	2.4	4.0	2.3	3.3	2.5
Neoplasms 140–239	3.1	4.5	1.9	2.1	4.4	6.9
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	1.2	2.9	0.8	2.0	1.7	3.7
Diseases of the blood and blood-forming organs 280–289	0.4	0.9	0.3	0.8	0.4	1.0
Mental disorders 290–319	1.4	9.2	1.3	10.0	1.5	8.3
Diseases of the nervous system and sense organs 320–389	3.7	3.7	4.2	3.4	3.2	4.0
Diseases of the circulatory system 390–459	4.2	5.2	5.0	5.6	3.4	4.8
Diseases of the respiratory system 460–519	5.6	7.3	6.3	6.3	4.9	8.2
Diseases of the digestive system 520–579	11.6	15.0	11.6	13.8	11.5	16.2
Diseases of the genitourinary system 580–629	11.5	17.4	4.4	5.5	18.8	28.9
Complications of pregnancy, childbirth and the puerperium 630–676	23.0	27.8	...	...	46.5	54.7
Diseases of the skin and subcutaneous tissue 680–709	2.5	2.3	3.0	2.6	1.9	2.0
Diseases of the musculoskeletal system and connective tissue 710–739	2.6	8.8	3.0	9.3	2.3	8.3
Congenital anomalies 740–759	0.3	0.9	0.3	0.8	0.3	1.1
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	1.3	2.7	1.2	2.2	1.3	3.1
Injury and poisoning 800–999	12.9	17.1	20.0	23.0	5.8	11.4
Supplementary classification V01–V82	1.2	5.9	0.5	1.7	1.8	9.9

Another large difference was found within the genitourinary category. Females 15–44 years of age in the United States had a discharge rate 10 times that for females in Poland for disorders of the breast. Differences in discharge rates for females were also reported in the injury and poisoning category. Discharge rates for males with a diagnosis in the injury and poisoning category did not differ significantly between the two countries, but the rate for U.S. females was nearly twice that for Polish females. Among the injury and poisoning diagnoses, discharge rates for U.S. females were more than nine times those for Polish females for dislocations, sprains, and strains and for certain complications of surgical and medical care. The U.S. rate for females for intracranial injury excluding skull fracture was more than double the Polish rate.

In contrast, the discharge rate for infectious and parasitic diseases was higher in Poland. Polish males had a significantly higher discharge rate than U.S. males had for diseases of the nervous system and sense organs, including an 80-percent higher rate for disorders of the peripheral nervous system. Within the digestive diseases category, the discharge rate for Polish patients for gastric and duodenal ulcers was three times the rate in the United States, and the Polish rate for appendicitis was more than twice the U.S. rate. However, the U.S. rate for hernia of the abdominal cavity was nearly three times the Polish rate.

The average length of stay for patients 15–44 years of age was 2.3 times, or 7.4 days, longer in Poland than in the United States (table AA). Average stays for both males and females were more than twice as long in Poland as in the United States. Average stays were shorter for females than for males in both countries, but short stays for complications of pregnancy, childbirth, and the puerperium accounted for much of the sex difference. When the pregnancy category

is excluded, the difference in average lengths of stay between males and females is reduced to 2.4 days in Poland; and in the United States it is not statistically significant.

Polish lengths of stay were at least twice U.S. lengths of stay for nearly all diagnostic categories. For infectious and parasitic diseases, the Polish average stay was more than six times the U.S. average stay. Average stays in Poland of 82.1 days for tuberculosis and of 29.8 days for hepatitis were major contributors to the longer average stay in this category.

Average lengths of stay for congenital anomalies and for diseases of the musculoskeletal system and connective tissue were also especially long in Poland. The Polish average stay for congenital anomalies was 3.7 times the U.S. stay, or nearly 18 days longer. Polish females had average stays that were more than 9 days longer than those for Polish males for congenital anomalies, but in the United States, average stays for the category did not differ significantly by sex. In the musculoskeletal and connective tissue category, the Polish average length of stay for arthropathies and related disorders was 4.5 times the average stay in the United States, or nearly 20 days longer.

Another contrast worth noting is in diseases of the respiratory system. The average stay for respiratory diseases was longer than the average for all conditions in Poland, but it was shorter in the United States. As a result, the Polish stay was 3.7 times, or nearly 12 days, longer than the U.S. stay. Within this category, the Polish average stay was more than four times the U.S. average for asthma, chronic disease of the tonsils and adenoids, and bronchitis and emphysema.

Average lengths of stay for diseases of the genitourinary system were more similar than for most of the categories, the Polish average being 80 percent, or 3.6 days, longer than the U.S. average. Within this category, stays for disorders

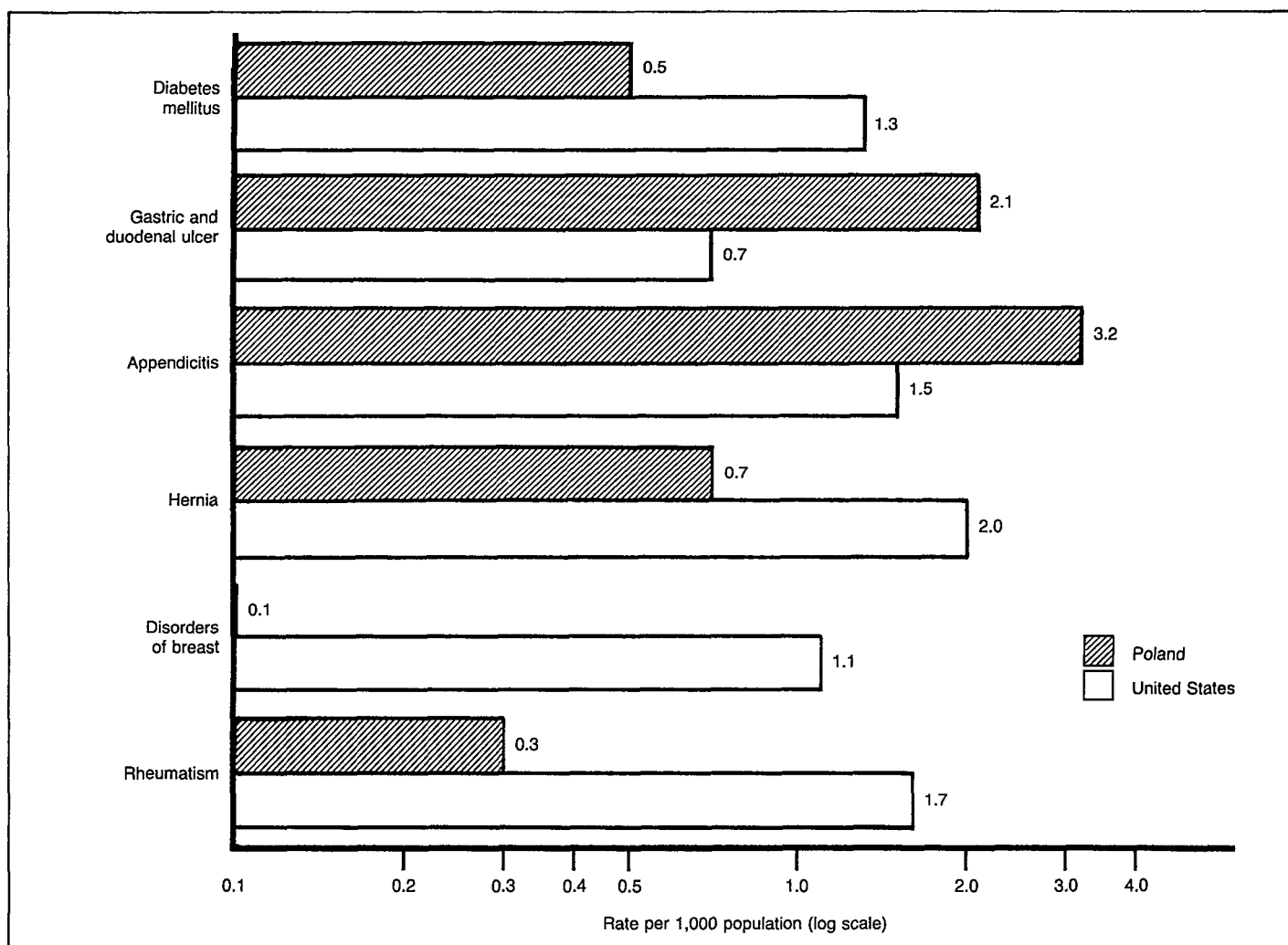


Figure 12. Discharge rates for patients 15–44 years of age for selected diagnoses: Poland and the United States, 1980

Table AA. Average length of stay for discharged inpatients 15–44 years of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Average length of stay in days						
All conditions	12.9	5.5	16.0	6.3	10.9	5.1
Infectious and parasitic diseases 001–139	39.6	6.2	43.5	6.2	34.7	6.2
Neoplasms 140–239	18.3	7.0	20.9	8.6	17.1	6.5
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	16.4	7.3	17.1	7.3	16.0	7.3
Diseases of the blood and blood-forming organs 280–289	14.9	5.6	12.1	4.9	16.4	6.2
Mental disorders 290–319	10.6	11.1	9.8	10.6	11.3	11.5
Diseases of the nervous system and sense organs 320–389	16.2	5.9	18.0	5.9	18.3	5.9
Diseases of the circulatory system 390–459	16.5	7.2	16.6	7.4	16.3	6.9
Diseases of the respiratory system 460–519	16.2	4.4	16.6	4.5	15.6	4.3
Diseases of the digestive system 520–579	12.8	5.5	13.0	5.1	12.6	5.7
Diseases of the genitourinary system 580–629	8.1	4.5	8.8	4.2	7.9	4.5
Complications of pregnancy, childbirth and the puerperium 630–676	7.1	3.8	...	...	7.1	3.8
Diseases of the skin and subcutaneous tissue 680–709	15.8	5.7	16.0	5.8	15.5	5.4
Diseases of the musculoskeletal system and connective tissue 710–739	23.1	6.6	21.4	6.4	25.3	6.8
Congenital anomalies 740–759	24.6	6.7	19.7	7.5	29.1	6.2
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	8.0	3.9	8.1	4.2	7.7	3.7
Injury and poisoning 800–999	12.4	6.1	12.9	6.2	10.6	6.0
Supplementary classification V01–V82	7.0	2.9	8.9	3.8	6.4	2.8

Table BB. Rate of patient care days for discharged inpatients 15–44 years of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD–9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
	Rate per 1,000 population					
All conditions	1,159.6	739.8	1,086.6	581.0	1,234.4	893.4
Infectious and parasitic diseases 001–139	145.4	14.9	175.6	14.1	114.4	15.8
Neoplasms 140–239	56.4	31.8	38.8	18.2	74.3	45.0
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	19.9	20.9	13.5	14.7	26.4	26.9
Diseases of the blood and blood-forming organs 280–289	5.2	5.1	3.5	3.8	6.9	6.3
Mental disorders 290–319	15.0	101.3	13.0	106.5	17.0	96.2
Diseases of the nervous system and sense organs 320–389	67.6	21.8	76.3	19.9	58.7	23.6
Diseases of the circulatory system 390–459	69.0	36.9	82.2	41.1	55.4	32.8
Diseases of the respiratory system 460–519	90.5	31.9	104.8	28.1	75.9	35.5
Diseases of the digestive system 520–579	148.2	82.0	150.8	71.2	145.6	92.4
Diseases of the genitourinary system 580–629	93.0	78.0	39.1	23.1	148.1	131.1
Complications of pregnancy, childbirth and the puerperium 630–676	164.0	105.1	...	...	331.9	206.7
Diseases of the skin and subcutaneous tissue 680–709	38.9	13.0	47.8	15.3	29.9	10.7
Diseases of the musculoskeletal system and connective tissue 710–739	60.4	58.0	63.6	59.6	57.1	56.5
Congenital anomalies 740–759	8.1	6.3	6.3	5.6	9.9	7.0
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	10.1	10.5	10.1	9.5	10.1	11.4
Injury and poisoning 800–999	160.0	105.1	256.5	143.5	61.1	68.0
Supplementary classification V01–V82	8.1	17.2	4.7	6.5	11.7	27.5

of menstruation and other abnormal bleeding from the female genital tract averaged 43 percent (1.4 days) longer in Poland, but Polish stays for other diagnoses were two or three times U.S. stays. The average stay in Poland for complications of pregnancy, childbirth, and the puerperium was 87 percent, or 3.3 days longer than the average U.S. stay for this category. The average length of stay for induced abortion was nearly the same in the two countries, but stays for other diagnoses in this category were at least twice as long in Poland as in the United States.

As can be seen in table BB, the leading cause of patient care days for females 15–44 years of age in both Poland and the United States was complications of pregnancy, childbirth, and the puerperium. The leading cause for males aged 15–44 years in both countries was injury and poisoning. These two diagnostic categories accounted for approximately 28 percent of all patient care days in both countries.

Diseases of the genitourinary system and diseases of the digestive system also were leading causes of patient care days for females in both countries, and mental disorders was a leading cause in the United States. Mental disorders also was a leading cause of patient care days for males in the United States, but in Poland, the other leading causes for males were diseases of the digestive system and infectious and parasitic diseases.

The rate of patient care days for the age group 15–44 years was 57 percent higher in Poland than in the United States, but there was considerable variation in the rate differences by diagnostic category. Rates were similar in the two countries for four categories: diseases of the musculoskeletal system and connective tissue; endocrine, nutritional, and metabolic diseases and immunity disorders; symptoms, signs, and ill-defined conditions; and diseases of the blood and blood-forming organs. For two diagnostic categories, mental disorders

and the supplementary classification, the rate of patient care days was higher in the United States.

In contrast, the Polish rate of patient care days for infectious and parasitic diseases was nearly 10 times the U.S. rate. Polish rates for the categories of diseases of the skin and subcutaneous tissue, diseases of the respiratory system, and diseases of the nervous system and sense organs were approximately three times U.S. rates. Among the respiratory diseases, the Polish rate of patient care days for bronchitis and emphysema was nine times the U.S. rate. In the nervous system and sense organ category, disorders of the eye and adnexa led to a patient care day rate in Poland that was six times that in the United States.

There also were variations in rates of patient care days by sex. For example, the male rate for injury and poisoning was 79 percent higher in Poland than in the United States, but female rates were about the same. In Poland, the rate of patient care days for diseases of the digestive system was higher for males than for females, but in the United States, females had a higher rate.

45–64 years

The most frequent discharge diagnosis for hospital patients 45–64 years of age in the United States and Poland was a disease of the circulatory system (table CC). Circulatory diseases were responsible for about one in every five discharges for both sexes and for one in every four discharges for males in the two countries. The second leading diagnostic category for the group 45–64 years of age was diseases of the digestive system, which accounted for 15 percent of the discharges in each country. Neoplasms and diseases of the genitourinary system together caused 22 percent of hospitalizations in Poland, and 21 percent of those in the United States.

Table CC. Rate of discharge for inpatients 45–64 years of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 population						
All conditions	126.1	194.8	138.8	195.4	114.9	194.2
Infectious and parasitic diseases 001–139	4.8	2.0	6.5	2.0	3.3	2.0
Neoplasms 140–239	13.5	20.2	12.3	16.7	14.6	23.3
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	3.4	8.3	2.7	6.3	3.9	10.1
Diseases of the blood and blood-forming organs 280–289	0.6	1.3	0.4	1.0	0.7	1.5
Mental disorders 290–319	1.4	10.1	1.2	11.7	1.5	8.7
Diseases of the nervous system and sense organs 320–389	6.3	9.2	7.0	8.2	5.7	10.1
Diseases of the circulatory system 390–459	27.2	38.5	34.3	48.3	20.9	29.6
Diseases of the respiratory system 460–519	11.0	15.0	14.8	16.3	7.6	13.9
Diseases of the digestive system 520–579	19.3	29.4	21.2	30.4	17.7	28.5
Diseases of the genitourinary system 580–629	13.8	20.7	7.7	15.6	19.2	25.3
Complications of pregnancy, childbirth and the puerperium 630–676	0.3	*0.1	...	...	0.5	*0.3
Diseases of the skin and subcutaneous tissue 680–709	2.8	3.4	3.2	3.1	2.5	3.7
Diseases of the musculoskeletal system and connective tissue 710–739	7.4	16.4	7.4	14.4	7.5	18.1
Congenital anomalies 740–759	0.2	0.9	0.2	0.7	0.2	1.0
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	1.3	3.3	1.4	3.3	1.2	3.2
Injury and poisoning 800–999	12.4	14.1	18.1	15.7	7.5	12.7
Supplementary classification V01–V82	0.4	1.9	0.5	1.7	0.3	2.1

The total discharge rate for patients 45–64 years of age was 54 percent higher in the United States than in Poland. The U.S. discharge rate was higher than the Polish rate for 13 of the 17 diagnostic categories, and it was more than twice the Polish rate for seven of the categories. Most of the seven accounted for only a small proportion of discharges. However, the rate difference for the endocrine, nutritional, and metabolic diseases and immunity disorders category should be noted. Patients with diabetes mellitus made up more than 60 percent of discharges in this category, and the U.S. discharge rate for diabetes was 2.6 times the Polish rate (table 8). Also of interest is the category diseases of the musculoskeletal system and connective tissue, for which the U.S. discharge rate was 2.2 times the Polish rate. As was the case for patients 15–44 years of age, there was a major difference in the discharge rate for rheumatism: The U.S. rate was more than five times the Polish rate.

The discharge rate for infectious and parasitic diseases was higher in Poland for patients 45–64 years of age, as it was for the younger age groups. The Polish rate was 2.4 times the U.S. rate. Discharge rates for diseases of the skin and subcutaneous tissue and for injury and poisoning did not differ significantly between the two countries. Within the injury and poisoning category, though, Poland reported 40 percent more discharges for fractures; and the U.S. discharge rate for dislocations, sprains, and strains was 4.7 times the Polish rate.

In addition, there were sex differences in the discharge rates for diagnoses within the injury and poisoning category. Males in Poland had a discharge rate more than twice that for U.S. males for fractures, but rates for females were not significantly different for the two countries (figure 13). The discharge rate for U.S. males for dislocations, sprains, and

strains was 3.6 times the rate for Polish males, but the rate for U.S. females was more than seven times that for Polish females.

Another diagnostic category for which there were sex differences in discharge rates was diseases of the respiratory system. Discharge rates for males in the United States and Poland for respiratory diseases did not differ significantly, but U.S. females had a discharge rate 1.8 times that of Polish females for these diseases. Among the respiratory diseases, discharge rates for U.S. females were more than twice the rates for Polish females for acute respiratory infections, pneumonia, and asthma.

Average lengths of stay for patients 45–64 years of age are shown by diagnostic category in table DD. Polish patients in this age group had stays an average of 2.4 times the stays of U.S. patients, or 11.2 days longer. Stays in Poland were longer for nearly all diagnostic categories. One exception was mental disorders, for which stays were virtually the same length in the two countries. Lengths of stay for mental disorders and neoplasms were significantly longer than the average for all conditions in the United States. The length of stay for neoplasms was also among the longest of any category in Poland. The Polish average stay was 2.3 times, or 13.2 days, longer than the U.S. average stay for neoplasms.

Other diagnostic categories for which average lengths of stay were particularly long in Poland were infectious and parasitic diseases and diseases of the musculoskeletal system and connective tissue. The Polish average stay for infectious and parasitic diseases was 5.7 times the U.S. average stay—more than 40 days longer. As was the case for younger age groups, this difference was largely attributable to long stays for tuberculosis (72.9 days) and hepatitis (36.8 days) in Poland. The average stay in Poland for diseases of the musculoskeletal

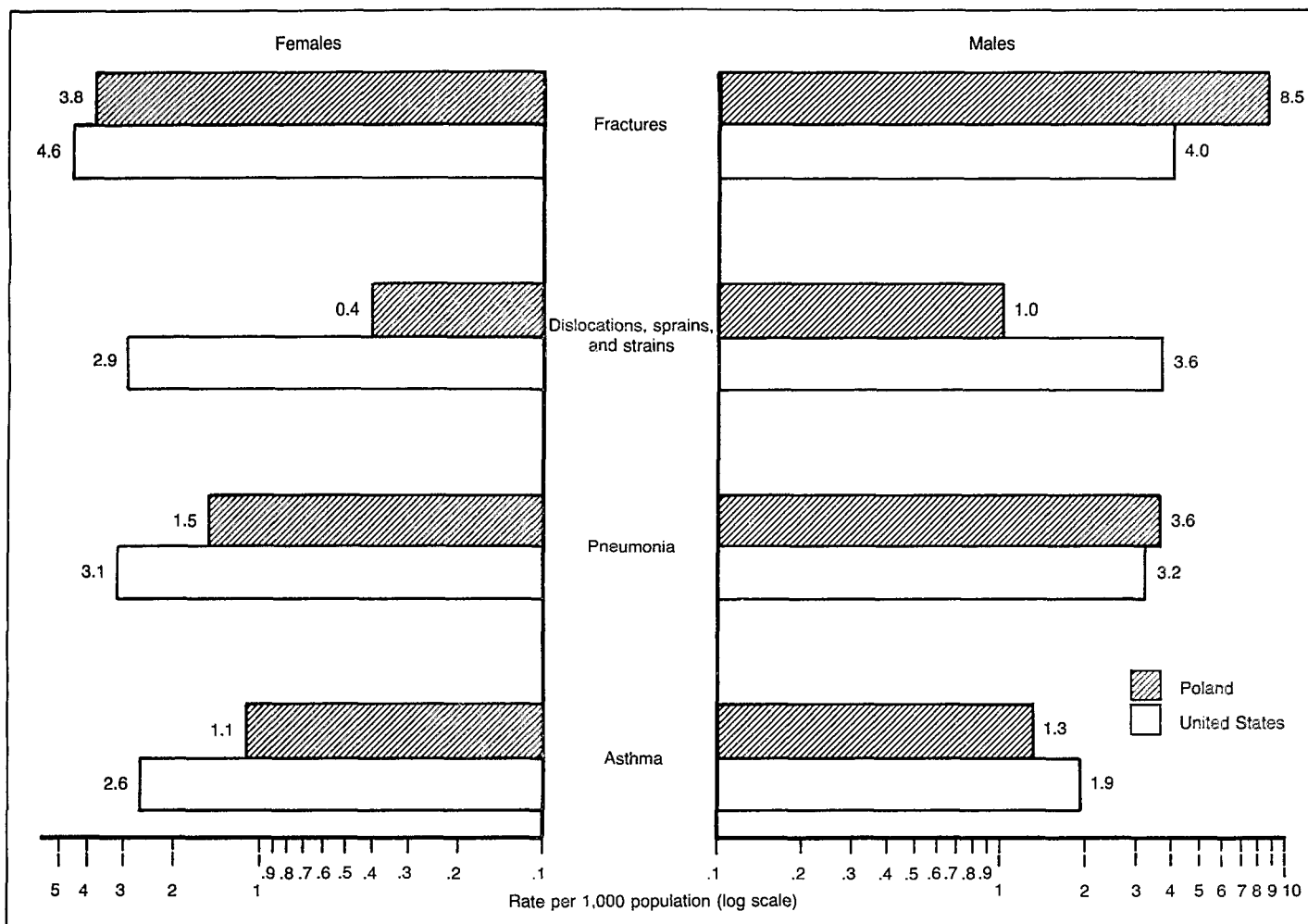


Figure 13. Discharge rates for patients 45-64 years of age for selected diagnoses, by sex: Poland and the United States, 1980

Table DD. Average length of stay for discharged inpatients 45-64 years of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Average length of stay in days						
All conditions	19.4	8.2	20.8	8.1	17.9	8.3
Infectious and parasitic diseases 001-139	49.4	8.7	57.0	8.8	36.4	8.5
Neoplasms 140-239	23.6	10.4	26.3	10.7	21.5	10.1
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	19.6	9.4	19.2	9.3	19.8	9.4
Diseases of the blood and blood-forming organs 280-289	20.9	8.6	20.8	9.1	20.8	8.2
Mental disorders 290-319	11.7	11.3	11.9	10.8	11.5	11.9
Diseases of the nervous system and sense organs 320-389	20.0	5.8	19.8	5.9	20.2	5.7
Diseases of the circulatory system 390-459	18.5	9.0	18.8	8.8	18.1	9.4
Diseases of the respiratory system 460-519	21.9	7.5	23.0	7.3	20.0	7.8
Diseases of the digestive system 520-579	16.8	7.6	16.4	7.3	17.1	7.8
Diseases of the genitourinary system 580-629	10.4	5.7	13.4	5.9	9.3	5.6
Complications of pregnancy, childbirth and the puerperium 630-676	6.5	*4.0	...	...	6.7	*4.0
Diseases of the skin and subcutaneous tissue 680-709	22.7	9.4	22.8	10.9	22.7	8.3
Diseases of the musculoskeletal system and connective tissue 710-739	24.1	8.3	22.8	7.8	25.3	8.6
Congenital anomalies 740-759	11.6	8.5	15.6	10.0	10.0	7.6
Certain conditions originating in the perinatal period 760-779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780-799	11.9	4.7	11.4	4.0	12.3	5.4
Injury and poisoning 800-999	15.1	8.2	15.3	7.7	14.8	8.7
Supplementary classification V01-V82	10.2	4.9	9.3	4.9	11.5	4.9

Table EE. Rate of patient care days for discharged inpatients 45–64 years of age by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD–9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
	Rate per 1,000 population					
All conditions	2,440.9	1,597.4	2,884.6	1,590.3	2,052.8	1,603.8
Infectious and parasitic diseases 001–139	237.2	17.1	370.3	17.2	120.9	17.0
Neoplasms 140–239	318.4	208.8	324.5	179.2	313.2	235.6
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	65.7	77.4	51.8	58.2	77.9	94.7
Diseases of the blood and blood-forming organs 280–289	11.9	10.8	8.3	9.2	15.0	12.3
Mental disorders 290–319	15.9	114.4	13.9	127.1	17.6	102.9
Diseases of the nervous system and sense organs 320–389	125.5	53.1	138.3	48.0	114.2	57.8
Diseases of the circulatory system 390–459	503.7	346.5	647.0	422.9	378.5	277.3
Diseases of the respiratory system 460–519	240.1	113.2	340.4	118.5	152.4	108.4
Diseases of the digestive system 520–579	323.9	222.8	346.5	222.5	304.1	223.0
Diseases of the genitourinary system 580–629	143.1	117.1	103.3	91.2	178.0	140.6
Complications of pregnancy, childbirth and the puerperium 630–676	1.7	*0.5	...	...	3.2	*1.0
Diseases of the skin and subcutaneous tissue 680–709	64.2	31.8	72.8	33.4	56.8	30.4
Diseases of the musculoskeletal system and connective tissue 710–739	179.3	135.1	168.1	111.8	189.1	156.1
Congenital anomalies 740–759	2.2	7.5	2.5	7.1	2.0	7.8
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	15.8	15.5	16.5	13.2	15.2	17.6
Injury and poisoning 800–999	187.8	115.4	275.4	121.4	111.1	110.0
Supplementary classification V01–V82	4.4	9.3	5.0	8.2	3.9	10.2

system and connective tissue was nearly three times the average stay in the United States, or nearly 16 days longer. Polish stays within this category were more than three times U.S. stays for rheumatism and for arthropathies and related disorders excluding osteoarthritis and allied disorders.

Also notable were differences between the two countries in average lengths of stay for diseases of the nervous system and sense organs and for diseases of the respiratory system. The length of stay for the former category was shorter than the average for all conditions in the United States but not in Poland. Polish stays were more than eight times U.S. stays for cataract and more than four times U.S. stays for other disorders of the eye and adnexa. In the respiratory disease category, the Polish length of stay was nearly four times the U.S. stay for diseases of the upper respiratory tract other than acute infections, which includes conditions such as deviated nasal septum and chronic sinusitis.

The leading cause of patient care days as well as the leading discharge category for U.S. and Polish patients 45–64 years of age was diseases of the circulatory system (table EE). Following circulatory diseases in importance in both countries were diseases of the digestive system and neoplasms. These three diagnostic categories accounted for nearly half of patient care days for the age group 45–64 years in both countries. The three categories were leading causes of patient care days for both males and females in the United States and for females in Poland. Infectious and parasitic diseases was the third leading category for Polish males, and neoplasms was the fourth.

Polish males used three times more patient care days per person than did Polish females for infectious and parasitic diseases. Their patient care day rate was 2.5 times that for Polish females for injury and poisoning and more than twice

the rate for Polish females for diseases of the respiratory system. Patient care rates for males in the United States did not differ significantly from those for females for any of these diagnostic categories.

Although the total rate of patient care days was 53 percent higher in Poland than in the United States, rates varied considerably by diagnostic category. For example, the Polish rate for infectious and parasitic diseases was nearly 14 times the U.S. rate, but the U.S. rate for mental disorders was more than 7 times the Polish rate. U.S. rates were also significantly higher than Polish rates for congenital anomalies and the supplementary classification, but neither of these categories was a major cause of patient care days in either country.

In addition to high rates for infectious and parasitic diseases, Polish rates of patient care days were more than twice U.S. rates for diseases of the nervous system and sense organs, diseases of the respiratory system, and diseases of the skin and subcutaneous tissue. Among the nervous system and sense organ diseases, Polish rates were more than three times U.S. rates for disorders of the peripheral nervous system and disorders of the eye and adnexa. In the respiratory disease category, the Polish rate was more than four times the U.S. rate for diseases of the upper respiratory tract other than acute infections and more than 5.5 times the U.S. rate for bronchitis and emphysema.

65 years and over

Patients 65 years of age and over, like the group 45–64 years of age, were most often hospitalized for a disease of the cardiovascular system (table FF). Cardiovascular diseases

Table FF. Rate of discharge for inpatients 65 years of age and over by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
	Rate per 1,000 population					
All conditions	163.3	383.7	200.8	411.8	139.8	364.7
Infectious and parasitic diseases 001-139	5.2	4.7	7.4	4.7	3.8	4.8
Neoplasms 140-239	16.8	40.3	23.7	51.0	12.5	33.0
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	4.2	16.2	3.1	12.3	4.9	18.8
Diseases of the blood and blood-forming organs 280-289	1.1	4.5	1.0	4.2	1.2	4.7
Mental disorders 290-319	0.4	9.4	0.3	9.9	0.4	9.1
Diseases of the nervous system and sense organs 320-389	7.0	23.6	7.5	22.8	6.6	24.0
Diseases of the circulatory system 390-459	57.5	110.8	68.7	121.9	50.5	103.4
Diseases of the respiratory system 460-519	18.3	38.5	27.1	49.4	12.8	31.1
Diseases of the digestive system 520-579	19.7	49.1	22.8	49.9	17.8	48.6
Diseases of the genitourinary system 580-629	10.0	26.9	15.3	38.3	6.6	19.3
Complications of pregnancy, childbirth and the puerperium 630-676	...	...	...	...	...	...
Diseases of the skin and subcutaneous tissue 680-709	3.4	5.2	3.3	4.3	3.4	5.7
Diseases of the musculoskeletal system and connective tissue 710-739	5.1	20.4	4.2	14.7	5.7	24.3
Congenital anomalies 740-759	0.0	0.8	*	*0.7	0.1	0.8
Certain conditions originating in the perinatal period 760-779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780-799	1.9	3.7	2.1	4.4	1.7	3.3
Injury and poisoning 800-999	12.5	27.4	14.1	20.9	11.5	31.7
Supplementary classification V01-V82	0.3	2.1	0.3	2.3	0.2	2.0

were the leading discharge diagnoses for both males and females 65 years of age and over in both Poland and the United States. These diseases accounted for 29 percent of discharges in the United States and 35 percent in Poland.

Other common diagnostic categories were diseases of the digestive system, diseases of the respiratory system, and neoplasms, which together were responsible for one-third of discharges of patients 65 years of age and over in both countries. The leading diagnoses did not differ by sex in Poland, and the only difference in the United States was that injury and poisoning was also a leading diagnosis for females.

The discharge rate for patients 65 years of age and over in the United States was twice the rate in Poland. Higher U.S. rates were reported for both sexes and for all the diagnostic categories except infectious and parasitic diseases, for which discharge rates were similar in the two countries.

U.S. discharge rates were three or four times Polish rates for endocrine, nutritional, and metabolic diseases and immunity disorders; diseases of the blood and blood-forming organs; diseases of the nervous system and sense organs; and diseases of the musculoskeletal system and connective tissue. In the category of endocrine, nutritional, and metabolic diseases and immunity disorders, the U.S. discharge rate for diabetes mellitus was 2.6 times the Polish rate (table 9). Diabetes mellitus accounted for 85 percent of discharges in this category in Poland but only 58 percent in the United States. Nearly one-fourth of U.S. discharges in this category were for disorders of fluid, electrolyte, and acid-base balance, principally dehydration and other volume depletion.

Cataract was responsible for 52 percent of U.S. discharges in the nervous system and sense organs category, compared with 30 percent of Polish discharges. The U.S. discharge rate for cataract was nearly six times the Polish rate. In addition,

the U.S. discharge rate for diseases of the central nervous system was nearly four times the Polish rate. Particularly large differences in the musculoskeletal system and connective tissue category included a U.S. discharge rate that was 13 times the Polish rate for rheumatism and one that was more than 21 times the Polish rate for disorders of bone and cartilage.

The U.S. discharge rate for diseases of the circulatory system was nearly twice the rate in Poland, but there was considerable variation between the countries for specific circulatory diseases (figure 14). For acute myocardial infarction, the U.S. rate was twice the Polish rate; for other ischemic heart disease, it was 3.6 times the Polish rate; and for cardiac dysrhythmias, it was 6.8 times the Polish rate. The U.S. rate for acute cerebrovascular disease was three times the Polish rate, but the Polish rate for atherosclerosis was more than four times the U.S. rate. The high Polish rate for atherosclerosis may reflect a difference in the way the disease is classified and coded in the two countries. Polish physicians may classify coronary atherosclerosis, a subcategory of chronic ischemic heart disease, as the more generalized atherosclerosis.

In the injury and poisoning category, the discharge rate for U.S. females was 2.8 times the rate for Polish females; but for males the U.S. rate was only 50 percent higher. The most frequent diagnosis in the category was fractures, for which U.S. females had a discharge rate 2.5 times that for Polish females. Discharge rates for U.S. and Polish males for fractures were about the same as the rate for Polish females. Fracture of the neck of the femur accounted for nearly half of all fracture discharges for both males and females in the United States. The discharge rate for U.S. males for such hip fracture was three times that for Polish males, and U.S. females had a rate nearly six times that for Polish females. In addition, the discharge rate for females in the United States

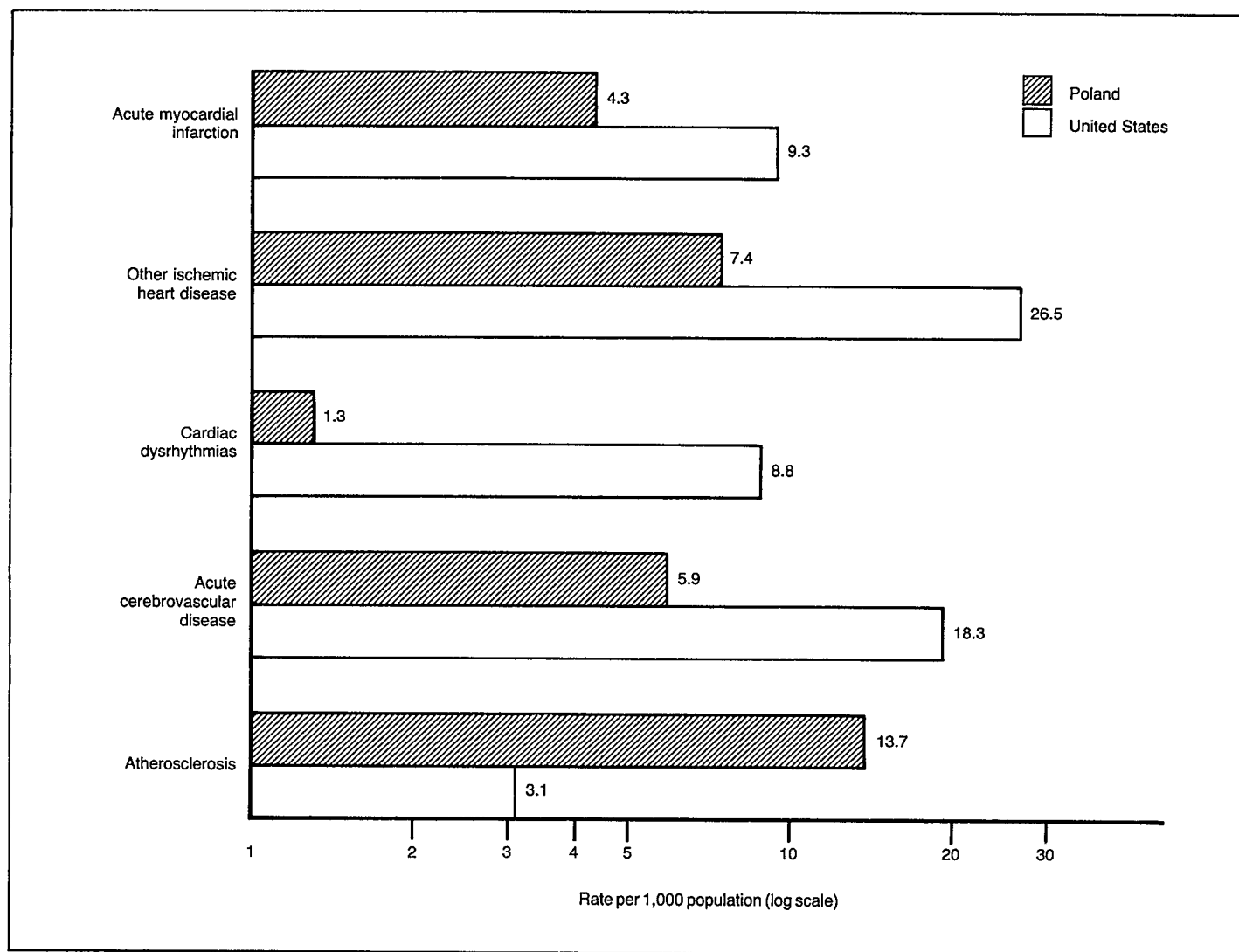


Figure 14. Discharge rates for patients 65 years of age and over for selected diseases of the circulatory system: Poland and the United States, 1980

for dislocations, sprains, and strains was more than six times the rate for females in Poland. The discharge rate for U.S. males for these conditions was 3.2 times the Polish rate.

The average lengths of stay for both male and female patients 65 years of age and over were twice as long in Poland as in the United States (table GG). Polish average lengths of stay were longer for each diagnostic category, ranging from 50 percent longer for injury and poisoning to 4.6 times the U.S. average for infectious and parasitic diseases.

The longest average lengths of stay in Poland were for infectious and parasitic diseases. Once again, prolonged hospitalizations for tuberculosis (65.4 days, on average) and hepatitis (an average of 40.6 days) were the main reasons for the long average length of stay for this category. The second longest average stay in Poland was for diseases of the skin and subcutaneous tissue. The length of stay for this category in the United States was longer than the average for all conditions, but the Polish length of stay was 2.7 times the U.S. average, or 21.8 days longer. Other categories for which U.S. stays were significantly longer than average were mental disorders, injury and poisoning, and neoplasms.

One large difference in lengths of stay between the two countries was in diseases of the nervous system and sense organs. As was the case for patients 45–64 years of age, the length of stay for this category was significantly shorter than the average for all conditions in the United States but not in Poland. As a result, the Polish average stay was 3.5 times the U.S. average stay, or 15.8 days longer. The major difference within the category was that the Polish average stay was 6.6 times the U.S. average stay for the diagnosis of cataract.

Further, the Polish average stay for diseases of the musculoskeletal system and connective tissue was 2.5 times the U.S. average, or 17.5 days longer. Polish stays for rheumatism were three times U.S. stays, and patients in both countries had particularly long stays for disorders of bone and cartilage.

The average length of stay for circulatory diseases was 80 percent longer in Poland, and Polish stays were more than 2.5 times U.S. stays for angina pectoris and for diseases of the veins and lymphatics, and other diseases of the circulatory system. The average length of stay for this last category was especially long in Poland, more than 29 days. Average

Table GG. Average length of stay for discharged inpatients 65 years of age and over by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Average length of stay in days						
All conditions	22.1	10.7	21.8	10.3	22.3	11.0
Infectious and parasitic diseases 001-139	52.1	11.3	55.0	10.7	48.6	11.6
Neoplasms 140-239	24.7	12.5	24.2	12.1	25.4	12.9
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	21.4	11.9	21.1	11.8	21.5	11.9
Diseases of the blood and blood-forming organs 280-289	23.8	9.8	23.6	8.7	24.1	10.4
Mental disorders 290-319	24.9	13.7	40.3	12.6	18.4	14.5
Diseases of the nervous system and sense organs 320-389	22.0	6.2	21.8	6.9	22.2	5.8
Diseases of the circulatory system 390-459	19.7	11.2	19.4	10.9	19.9	11.4
Diseases of the respiratory system 460-519	23.3	9.8	23.8	9.8	22.8	9.8
Diseases of the digestive system 520-579	17.9	9.4	17.0	8.9	18.6	9.8
Diseases of the genitourinary system 580-629	17.5	8.8	18.7	9.0	15.7	8.6
Complications of pregnancy, childbirth and the puerperium 630-676	...	...	...	...	...	...
Diseases of the skin and subcutaneous tissue 680-709	34.7	12.8	28.0	11.5	38.7	13.5
Diseases of the musculoskeletal system and connective tissue 710-739	29.0	11.6	26.1	11.2	30.4	11.8
Congenital anomalies 740-759	18.2	10.1	*	*9.2	20.0	10.7
Certain conditions originating in the perinatal period 760-779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780-799	14.9	7.5	14.3	6.7	15.3	8.2
Injury and poisoning 800-999	20.3	13.2	17.8	12.0	22.2	13.7
Supplementary classification V01-V82	11.5	6.4	9.4	6.0	13.8	6.7

Table HH. Rate of patient care days for discharged inpatients 65 years of age and over by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 population						
All conditions	3,604.0	4,098.1	4,380.5	4,243.6	3,115.7	3,999.8
Infectious and parasitic diseases 001-139	271.4	53.4	406.2	49.9	186.6	55.7
Neoplasms 140-239	416.4	503.8	572.6	618.7	318.2	426.1
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	89.6	192.1	65.0	145.3	105.1	223.7
Diseases of the blood and blood-forming organs 280-289	26.4	43.9	22.9	36.7	28.7	48.7
Mental disorders 290-319	9.7	129.3	12.1	125.7	8.1	131.7
Diseases of the nervous system and sense organs 320-389	153.4	146.1	164.5	157.5	146.4	138.4
Diseases of the circulatory system 390-459	1,131.8	1,238.8	1,332.5	1,322.9	1,005.6	1,181.9
Diseases of the respiratory system 460-519	426.8	376.9	643.0	483.8	290.8	304.6
Diseases of the digestive system 520-579	353.4	462.1	388.3	443.7	331.5	474.5
Diseases of the genitourinary system 580-629	174.0	237.5	286.0	343.9	103.6	165.7
Complications of pregnancy, childbirth and the puerperium 630-676	...	...	...	...	...	...
Diseases of the skin and subcutaneous tissue 680-709	117.6	66.3	93.0	49.6	133.1	77.5
Diseases of the musculoskeletal system and connective tissue 710-739	148.9	237.9	110.4	165.1	173.2	287.2
Congenital anomalies 740-759	0.8	8.0	*	*6.6	1.1	9.0
Certain conditions originating in the perinatal period 760-779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780-799	27.7	28.0	30.5	29.3	25.9	27.1
Injury and poisoning 800-999	253.1	360.3	250.0	250.9	255.0	434.2
Supplementary classification V01-V82	3.0	13.8	3.1	14.1	2.9	13.6

U.S. lengths of stay exceeded 2 weeks for atherosclerosis and other diseases of the arteries, arterioles, and capillaries.

Diseases of the circulatory system accounted for approximately 30 percent of all patient care days for patients 65 years of age and over (table HH). As was the case for discharges, circulatory diseases were the leading cause of patient care days for both sexes and in both countries. Neoplasms was also among the leading causes of patient care days for both sexes in both countries. For males in both countries,

diseases of the respiratory system was a leading cause of patient care days. Infectious and parasitic diseases was a leading cause for Polish males, and diseases of the digestive system was a leading cause for U.S. males. Digestive diseases was a leading category for females in both countries, along with diseases of the respiratory system for Polish females and injury and poisoning for U.S. females.

Only patients 65 years of age and over had a higher rate of patient care days in the United States than in Poland.

This difference reflects a 28-percent higher rate for U.S. females. Patient care day rates for males in the two countries did not differ significantly.

Differences by sex in patient care day rates were reported for a number of diagnostic categories. U.S. females had a 70-percent higher rate than Polish females had for injury and poisoning, a 60-percent higher rate for diseases of the genitourinary system, a 43-percent higher rate for diseases of the digestive system, a 34-percent higher rate for neoplasms, and an 18-percent higher rate for diseases of the circulatory system. Differences in patient care day rates between U.S. and Polish males were not statistically significant for any of these diagnostic categories.

Polish males had a patient care day rate one-third higher than that for U.S. males for diseases of the respiratory system, but rates for females in the two countries did not differ significantly. Further, Polish males had a patient care day rate eight times that for U.S. males for infectious and parasitic diseases, and the rate for Polish females was three times that for U.S. females. For diseases of the skin and subcutaneous tissue, the patient care day rate was 88 percent higher for Polish males, 72 percent higher for Polish females.

Both U.S. males and females had higher rates of patient care days than their Polish counterparts had for endocrine, nutritional, and metabolic diseases and immunity disorders; diseases of the blood and blood-forming organs; mental disorders; diseases of the musculoskeletal system and connective tissue; congenital anomalies; and the supplementary classifica-

tion. Diseases of the nervous system and sense organs was the only category for which there were no significant differences in rates of patient care days.

Fatality rates

Fatality rates and the percent distribution of deaths in Polish and U.S. hospitals are compared by age and sex in table JJ. The total fatality rate was higher in Poland than in the United States, 34 deaths per 1,000 discharges versus 28 deaths per 1,000 discharges. In both countries, a greater proportion of male than of female patients were discharged dead, but fatality rates for both males and females were higher in Poland than in the United States.

Fatality rates varied by age in a similar manner in the two countries. Rates were higher for infants under 1 year of age than for older children or young adults, and the rates increased with age after 34 years. The increases were more marked in Poland. All fatality rates were significantly higher in Polish hospitals except those for patient 1–25 years of age, and the differences were substantial for the older age groups. For example, one of every four Polish patients 85 years of age and over was discharged dead, compared with one in eight U.S. patients.

Although death rates in general were higher in Poland than in the United States (figure 5), they do not account totally for the higher Polish hospital fatality rates. High fatality

Table JJ. Rate and percent distribution of inpatients discharged dead by age, according to sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries]

Age	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 discharges						
All ages	34	28	41	34	28	24
Under 1 year	31	21	33	18	29	25
1–4 years	6	*4	6	*	6	*
5–14 years	3	*3	3	*	3	*
15–24 years	3	3	6	*6	2	*
25–34 years	5	3	9	6	3	*2
35–44 years	13	6	19	9	8	*5
45–54 years	26	16	35	20	17	13
55–64 years	52	32	61	35	41	31
65–74 years	96	55	109	64	84	47
75–84 years	165	77	173	94	158	66
85 years and over	254	127	248	155	257	112
Percent distribution						
All ages	100.0	100.0	100.0	100.0	100.0	100.0
Under 1 year	5.2	3.7	5.5	3.4	6.7	4.1
1–4 years	0.8	*0.5	0.9	*	0.7	*
5–14 years	0.9	*0.5	0.8	*	0.9	*
15–24 years	1.2	1.3	1.6	*1.6	0.8	*
25–34 years	2.4	1.8	2.8	2.0	1.9	*1.5
35–44 years	4.0	2.2	6.8	2.5	3.1	*2.0
45–54 years	10.8	6.2	12.9	6.7	8.2	5.7
55–64 years	15.9	14.5	17.9	14.8	13.5	14.2
65–74 years	29.3	26.3	29.7	28.7	28.8	23.7
75–84 years	24.4	27.0	19.8	26.2	30.3	27.7
85 years and over	5.0	16.0	3.3	12.9	7.1	19.3

and low discharge rates, particularly for the elderly, suggest that only the more severely ill were hospitalized in Poland.

The percent distribution of deaths indicates, as expected, that most hospital deaths occur in the older age groups. In Poland, patients 65 years of age and over accounted for 58.7 percent of all hospital deaths; in the United States, 69.3 percent. The percents of deaths were similar in the two countries for patients 1–24 years of age but were higher in Poland for infants under 1 year and for patients 25–74 years of age. U.S. hospitals had higher percents of deaths for the two oldest age groups, especially for patients 85 years of age and over.

The higher proportion of U.S. than of Polish hospital deaths in the oldest age groups probably is related to their higher frequency of hospitalization in the United States, which would increase their likelihood of dying in the hospital. As can be seen in figure 15, more than half of the deaths of persons 65 years and over in the United States took place in hospitals, compared with about a third in Poland. The percent of deaths in hospitals was similar in the two countries for most of the other age groups; however, infants were much more likely to die in hospitals in the United States.

Table KK presents fatality rates according to diagnostic category by sex. In both countries, the highest fatality rates were for neoplasms and diseases of the circulatory system.

Fatality rates in Polish hospitals were also significantly above average for certain conditions originating in the perinatal period and for congenital anomalies.

Fatality rates were higher in Poland for most diagnostic categories. Especially large differences, Polish fatality rates close to three times U.S. rates, were reported for congenital anomalies; perinatal conditions; and symptoms, signs, and ill-defined conditions. Polish rates were 25–65 percent higher than U.S. rates for endocrine, nutritional, and metabolic diseases and immunity disorders; genitourinary diseases; injury and poisoning; circulatory diseases; and digestive diseases. One of the smallest differences in fatality rates was for neoplasms. The Polish rate was only 17 percent higher than the U.S. rate. Also of note, the U.S. fatality rate was 95 percent higher than the Polish rate for diseases of the respiratory system and 56 percent higher for infectious and parasitic diseases.

Fatality rates for selected conditions within the diagnostic categories are illustrated in figure 16. Fatality rates for two of the major causes of death—malignant neoplasm of the trachea, bronchus, and lung and acute myocardial infarction—were fairly similar in the two countries. However, there were large differences in fatality rates for other circulatory diseases. For example, the U.S. rate for cardiac dysrhythmias was

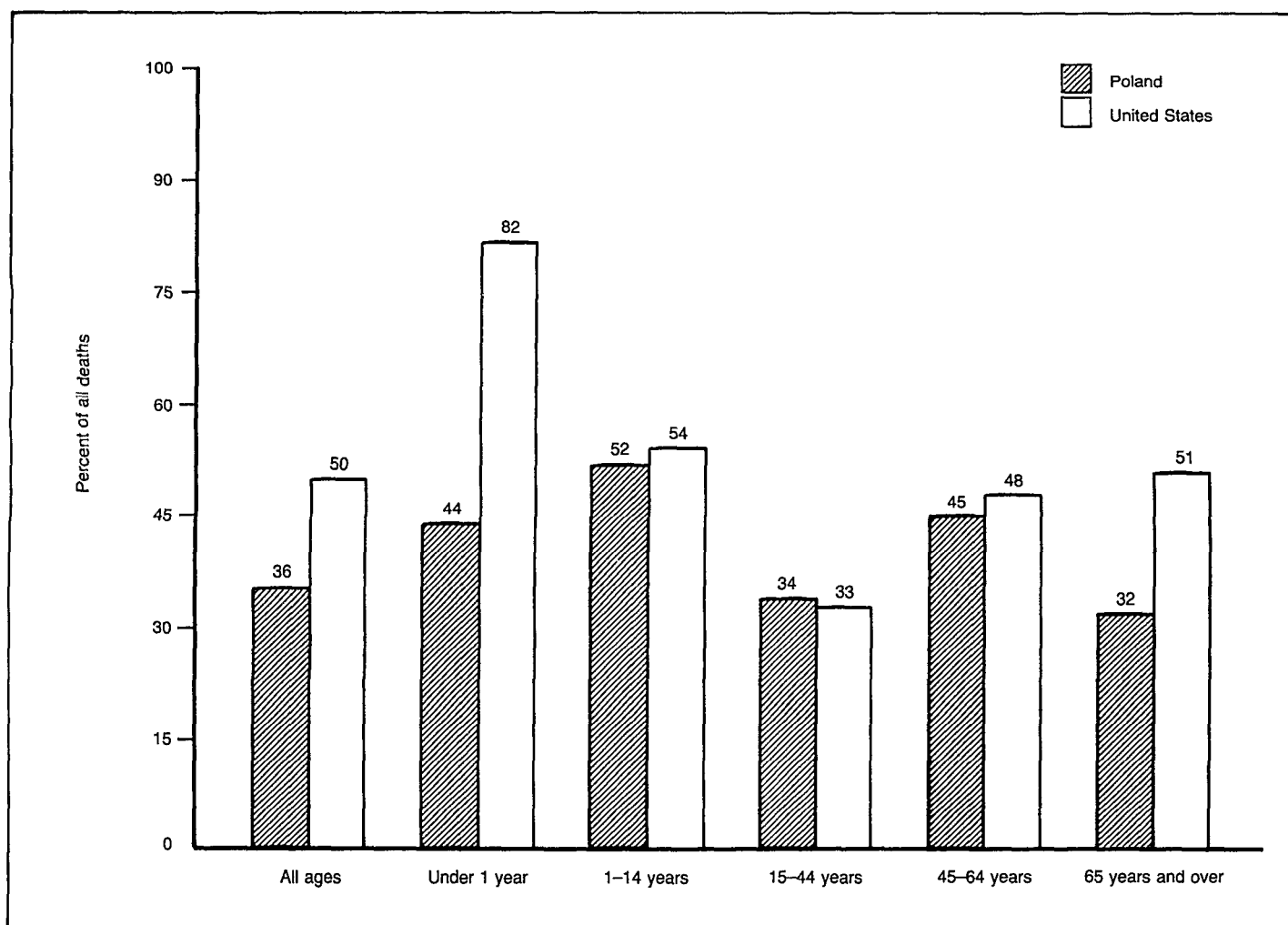


Figure 15. Percent of all deaths that occur in hospitals by age: Poland and the United States, 1980

Table KK. Rate of inpatients of all ages discharged dead by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries. Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 1,000 discharges						
All conditions	34.3	27.9	41.3	33.7	28.2	23.6
Infectious and parasitic diseases 001-139	19.5	30.4	23.4	33.1	14.3	*28.1
Neoplasms 140-239	120.8	103.4	159.8	132.9	90.7	82.9
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	34.2	20.7	38.6	*20.4	31.8	20.9
Diseases of the blood and blood-forming organs 280-289	18.9	*	20.1	*	18.0	*
Mental disorders 290-319	3.5	*5.4	4.2	*5.8	2.9	*
Diseases of the nervous system and sense organs 320-389	11.8	9.1	13.4	*10.9	10.1	*7.6
Diseases of the circulatory system 390-459	118.5	80.5	116.2	78.3	121.2	82.7
Diseases of the respiratory system 460-519	15.1	29.5	16.1	35.7	13.6	23.1
Diseases of the digestive system 520-579	18.9	15.1	21.2	14.4	16.5	15.7
Diseases of the genitourinary system 580-629	11.6	7.1	24.3	11.3	6.8	5.2
Complications of pregnancy, childbirth and the puerperium 630-676	0.2	*	...	...	0.2	*
Diseases of the skin and subcutaneous tissue 680-709	2.1	*	2.2	*	2.0	*
Diseases of the musculoskeletal system and connective tissue 710-739	2.3	*2.5	2.3	*	2.3	*
Congenital anomalies 740-759	55.9	*18.0	53.5	*	58.5	*
Certain conditions originating in the perinatal period 760-779	85.1	29.6	104.7	27.1	64.8	32.5
Symptoms, signs and ill-defined conditions 780-799	26.6	*9.1	21.5	*	31.6	*
Injury and poisoning 800-999	17.6	11.4	17.9	11.8	17.1	10.9
Supplementary classification V01-V82	-	*	-	*	-	*

5.7 times the Polish rate, and the Polish rate for acute cerebrovascular disease was more than twice the U.S. rate. Other interesting differences include a U.S. fatality rate for pneumonia that was twice the rate in Poland and a Polish fatality rate for chronic liver disease and cirrhosis that was twice the rate in the United States.

Fatality rates for patients under 65 years of age are shown by diagnostic category in table LL. The number of patients under 65 years who were discharged dead is small. As a result, most of the estimates of fatality rates by diagnosis for the more detailed age groups (under 1 year, 1-14, 15-44, and 45-64 years) are unreliable. Even for all patients under 65 years of age, most estimates of fatality rates by sex are not reliable.

Patterns of fatality rates by diagnostic category for patients under 65 years of age are much the same as for patients of all ages. The highest fatality rates in Poland were for neoplasms and certain conditions originating in the perinatal period. Polish fatality rates were also high for diseases of the circulatory system and congenital anomalies. In the United States, the highest fatality rate was for neoplasms. Fatality rates for diseases of the circulatory system and certain conditions originating in the perinatal period were also higher than for other diagnostic categories.

The fatality rate for all patients under 65 years of age was 46 percent higher in Poland than in the United States. Polish fatality rates were approximately three times U.S. rates for congenital anomalies and for certain conditions originating in the perinatal period. Fatality rates for diseases of the circulatory system and injury and poisoning were more than 70 percent higher in Poland. For neoplasms, though, fatality rates did not differ significantly between the two countries.

Table LL. Rate of inpatients under 65 years of age discharged dead by diagnostic chapter: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries. Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Poland	United States
Rate per 1,000 discharges		
All conditions	17.1	11.7
Infectious and parasitic diseases 001-139	14.9	*9.9
Neoplasms 140-239	85.8	73.1
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	18.1	*
Diseases of the blood and blood-forming organs 280-289	11.3	*
Mental disorders 290-319	2.8	*
Diseases of the nervous system and sense organs 320-389	10.4	*6.9
Diseases of the circulatory system 390-459	58.6	34.0
Diseases of the respiratory system 460-519	6.9	8.0
Diseases of the digestive system 520-579	9.2	10.1
Diseases of the genitourinary system 580-629	5.7	*1.9
Complications of pregnancy, childbirth and the puerperium 630-676	0.2	*
Diseases of the skin and subcutaneous tissue 680-709	1.3	*
Diseases of the musculoskeletal system and connective tissue 710-739	1.9	*
Congenital anomalies 740-759	56.1	18.3
Certain conditions originating in the perinatal period 760-779	85.1	29.6
Symptoms, signs and ill-defined conditions 780-799	9.7	*
Injury and poisoning 800-999	12.6	7.4
Supplementary classification V01-V82	-	*

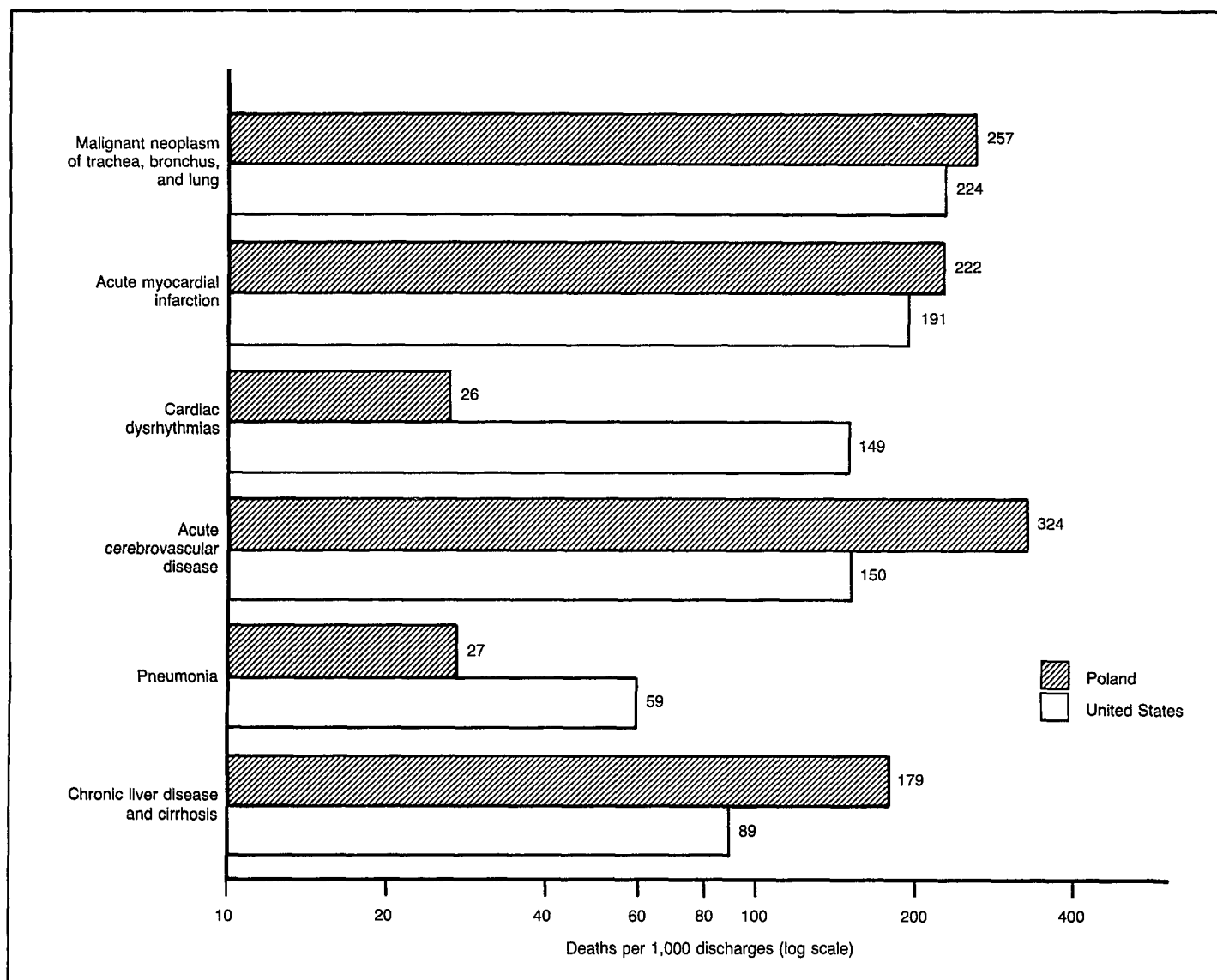


Figure 16. Fatality rates for selected conditions: Poland and the United States, 1980

Table MM shows fatality rates for patients 65 years of age and over by sex and according to diagnostic category. As was the case for younger patients, fatality rates for neoplasms and diseases of the circulatory system were high in both countries. The Polish fatality rate for symptoms, signs, and ill-defined conditions was also significantly above average, as was the rate for infectious and parasitic diseases in the United States.

The total fatality rate for patients 65 years of age and over was 71 percent higher in Poland than in the United States. Polish rates were at least twice U.S. rates for three diagnostic categories: diseases of the digestive system, diseases of the genitourinary system, and injury and poisoning. In addition, the Polish rate was 87 percent higher for endocrine, nutritional, and metabolic diseases and immunity disorders, 68 percent higher for circulatory diseases, and 45 percent higher for neoplasms. In contrast, the U.S. fatality rate for infectious and parasitic diseases was nearly twice the Polish

rate, and the U.S. rate was 25 percent higher for diseases of the respiratory system.

The fatality rate for males 65 years of age and over was 57 percent higher and that for females was 83 percent higher in Poland. Patterns of fatality rates by diagnostic category were generally similar for males and females, but there were some differences. For example, Polish males had fatality rates 2.6 times those for U.S. males for diseases of the digestive and genitourinary system. Fatality rates for Polish females were 81–84 percent higher for these diagnostic categories. On the other hand, Polish females had a fatality rate more than twice that for U.S. females for injury and poisoning; the rate for Polish males was 81 percent higher. Also, the fatality rate for U.S. males with a respiratory disease diagnosis was 42 percent higher than the rate for Polish males, but the rates for females in the two countries did not differ significantly.

Table MM. Rate of inpatients 65 years of age and over discharged dead by diagnostic chapter and sex: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Diagnostic chapters and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnostic chapter and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
	Rate per 1,000 discharges					
All conditions	124.4	72.7	131.8	83.9	117.8	64.2
Infectious and parasitic diseases 001-139	61.7	120.6	68.7	155.7	53.3	*96.8
Neoplasms 140-239	211.8	146.1	220.0	165.5	202.1	125.7
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	87.3	46.7	109.3	*49.8	78.7	45.2
Diseases of the blood and blood-forming organs 280-289	52.2	*	60.6	*	47.8	*
Mental disorders 290-319	22.1	*25.4	50.0	*	10.4	*
Diseases of the nervous system and sense organs 320-389	20.2	*13.3	27.2	*	15.1	*
Diseases of the circulatory system 390-459	197.3	117.7	203.6	124.5	191.9	112.4
Diseases of the respiratory system 460-519	67.6	84.7	69.9	99.2	64.6	68.9
Diseases of the digestive system 520-579	75.0	34.5	87.1	33.1	65.4	35.5
Diseases of the genitourinary system 580-629	64.3	29.2	63.7	*24.2	65.2	36.0
Complications of pregnancy, childbirth and the puerperium 630-676	-	-	...	...	-	-
Diseases of the skin and subcutaneous tissue 680-709	7.4	*	4.3	*	9.3	*
Diseases of the musculoskeletal system and connective tissue 710-739	4.9	*	8.5	*	3.2	*
Congenital anomalies 740-759	55.6	*	-	*	71.4	*
Certain conditions originating in the perinatal period 760-779	-	-	-	-	-	-
Symptoms, signs and ill-defined conditions 780-799	156.1	*	123.7	*	180.7	*
Injury and poisoning 800-999	59.4	28.1	65.8	*36.4	54.5	24.4
Supplementary classification V01-V82	-	*	-	*	-	*

Discussion

The general pattern of hospital use was different in Poland than in the United States. Poland had a lower discharge rate but a longer average length of stay than the United States had. Because of its longer stays, total hospital use, as measured by the rate of patient care days, was higher in Poland.

Lower discharge rates and longer average stays than for U.S. patients have also been reported for other European countries, such as England and Wales, France, Sweden, and West Germany (NCHS, 1980c). Among the explanations that have been suggested for this European pattern is the division of physicians providing ambulatory versus inpatient hospital care (Romer and Roemer, 1977; Bacon, Wojtyniak, and Krzyzanowski, 1984).

In the United States, one physician is usually responsible for treating the patient in an ambulatory care setting and for admitting and discharging the patient to and from a hospital. Because the patient remains in the care of the same physician before, during, and after a hospitalization, the physician presumably is more likely to admit the patient to the hospital and to discharge the patient sooner than would one providing only inpatient or ambulatory care.

In Poland and other European countries, the physician who treats the patient before and after a hospitalization is usually not the physician who treats the patient during the hospitalization. In this situation, the ambulatory care physician may be reluctant to admit the patient and, instead, may provide outpatient treatment. Poland's longer lengths of stay thus could have been partly due to a greater selectivity of serious cases as well as to a tendency for the ward physician to keep the patient until "fully" recovered. The greater number of ambulatory care contacts per person in Poland would support this view, as would its higher hospital fatality rates, assuming that the more seriously ill patients are apt to die.

It is also possible that these differences in hospital use patterns are related to other factors. For example, differences in the organization and financing of the health care systems could have had an effect. The nationalized, public system in Poland contrasts with the decentralized, private system in the United States. Polish physicians are largely salaried by the national system, but U.S. physicians are primarily in private, fee-for-service practices. Medical care in Poland is free to patients, but in the United States patients often have out-of-pocket costs for medical care. The emphasis on advances in medical technology is greater in the United States, and a more highly developed screening system for some population groups exists in Poland.

There were notable variations in the general patterns of hospital use in the two countries for children 1–14 years

of age and for the elderly 65 years of age and over. Children 1–14 years of age were the only major age group for which no significant difference was found in discharge rates between the two countries. However, this age group had the largest differences in average lengths of stay and rates of patient care days.

Discharge rates for U.S. children have been found to be relatively low in other cross-national comparisons (NCHS, 1980c). The low rates were suggested to result from an emphasis on ambulatory care for U.S. children, particularly by pediatricians, and from financial barriers to health care for some children (NCHS, 1984b). Polish children have no financial barriers to care, and the proportion of physicians who are pediatricians is higher in Poland than in the United States. The Polish emphasis on ambulatory care is suggested by the country's higher rate of ambulatory visits and special programs of preventive care for infants and children.

The longer hospital stays for Polish children may reflect a greater seriousness of their illnesses. Death rates were higher for children 1–14 years of age in Poland than in the United States. The longer stays could also reflect different approaches to the treatment of common children's problems—U.S. children may have been treated surgically more frequently than Polish children. For example, U.S. discharge rates were higher and lengths of stay much shorter for chronic disease of tonsils and adenoids, often treated in the United States with a tonsillectomy, and diseases of the ear and mastoid process, often treated by U.S. physicians with a myringotomy. Unfortunately, surgical information is not collected in the Polish survey.

Patients 65 years of age and over were the only age group in the United States that had higher total hospital use, that is, a higher rate of patient care days. This primarily reflects a U.S. discharge rate that was more than twice the Polish rate for this age group. The difference in discharge rates was even more pronounced for the oldest patients; the U.S. rate for patients 85 years of age and over was four times the Polish rate. Average lengths of stay for the elderly were higher in Poland, but the smallest difference in length of stay for any age group was for patients 85 years of age and over. The fatality rate for patients 65 years of age and over was also higher in Poland, suggesting that the Polish patients were more seriously ill. However, only about a third of the Polish population in this age group who died did so in hospitals, compared with more than half in the United States.

One reason suggested for these differences is a greater emphasis on institutional care for the elderly in the United States (Bacon, Wojtyniak, and Krzyzanowski, 1984). The

Medicare program is focused on acute care in hospitals; the Medicaid program, on chronic care in nursing homes. The number of nursing home beds per 1,000 persons 65 years of age and over is also much higher in the United States. Family members are usually more available to care for the elderly in Poland; children and elderly parents are more likely to live in the same area (Shanas, 1973), and the elderly are less likely to live alone than are those in the United States. The availability of home health care services, such as visiting nurse programs, also helps the elderly in Poland avoid institutions.

Hospital use rates for some specific conditions also departed from the general patterns. Among the conditions for which U.S. discharge rates were particularly high compared with Polish rates were mental disorders and certain conditions originating in the perinatal period. Both of these differences resulted, at least in part, from variations in the data systems of the two countries. There were more U.S. than Polish discharges for mental disorders because patients treated in psychiatric units of short-stay hospitals were included in the U.S. data but not in the Polish survey. Newborn infants were sampled without regard to their health status in the U.S. survey, but they had to be reported only if sick in the Polish survey. This probably led to some underreporting of perinatal conditions in Poland.

U.S. discharge rates for diabetes mellitus were 2.6 times Polish rates for the age groups 15–44 years, 45–64 years, and 65 years and over, and the death rate for diabetes mellitus was 23 percent higher in the United States. This could mean that more patients have diabetes in the U.S. population. Further, diabetics may have easier access to outpatient services in Poland, where there are special clinics for the treatment of diabetes.

Several problems with the musculoskeletal system were much more frequent causes of hospitalization in the United States. U.S. discharge rates for rheumatism were 5–13 times Polish rates for patients aged 15 years and over. For patients 65 years of age and over, disorders of bone and cartilage caused a discharge rate in the United States that was 21 times that in Poland. U.S. discharge rates for dislocations, sprains, and strains were about five times those in Poland for patients 15 years of age and over, and for patients 65 years of age and over, fracture of the neck of the femur gave U.S. females a discharge rate six times that for Polish females. U.S. males had a rate three times that for Polish males.

These differences are probably explained by several factors. There may be a greater prevalence of musculoskeletal problems, such as osteoporosis, in the U.S. population. U.S. patients may also be hospitalized for less severe cases of these disorders. Outpatient treatment is emphasized in Poland for such conditions as rheumatism and dislocations, sprains, and strains. Surgical treatment, such as joint replacement, is probably more common in the United States for musculoskeletal problems.

Discharge rates for certain circulatory diseases were also particularly high in the United States for patients 65 years of age and over. In part, the higher rates were probably due to differences in disease classification. Higher U.S. rates

for ischemic heart disease may be the result of the classification of coronary atherosclerosis as chronic ischemic heart disease in the United States but as the more generalized atherosclerosis in Poland. However, the U.S. discharge rate for patients 65 years of age and over for acute cerebrovascular disease was three times the Polish rate—and for cardiac dysrhythmias, nearly seven times the Polish rate. The death rate for this age group for cerebrovascular disease was 16 percent higher in the United States. These differences in discharge rates may also have been the result of greater development of the technology to diagnose and treat these conditions in the United States.

Although discharge rates were higher in the United States for most conditions, some rates were higher in Poland. Polish discharge rates for infectious and parasitic diseases were higher for all age groups under 65 years. One of the main diagnoses in this category in Poland was tuberculosis. Tuberculosis sanitariums were covered by the Polish survey, but nearly all hospitals specializing in the treatment of tuberculosis and other respiratory diseases were excluded from the U.S. survey because they had stays of more than 30 days. However, the Polish death rate for tuberculosis was more than nine times the U.S. rate, suggesting that the disease was a more serious health problem for the Polish population.

Another major diagnosis in the infectious and parasitic diseases category for Polish patients was viral hepatitis, for which hospitalization was mandatory in Poland. In addition, Polish infants under 1 year of age had a discharge rate for intestinal infectious diseases that was more than seven times that for U.S. infants. The infant mortality rate in Poland for intestinal infectious diseases was six times the U.S. rate.

It should also be noted that the hospital fatality rate for infectious and parasitic diseases was higher in the United States. This may indicate that Polish patients were hospitalized for less severe cases of infectious and parasitic diseases than were U.S. patients.

For infants under 1 year of age, the discharge rate was much higher in Poland for respiratory diseases, especially for pneumonia and for bronchitis and emphysema. Polish children 1–14 years of age also had higher discharge rates for these conditions as well as for acute respiratory infections. Death rates for both age groups were higher in Poland for pneumonia, and Polish infants under 1 year died more frequently of bronchitis, emphysema, and asthma.

Polish rates of patient care days also were substantially higher for respiratory diseases. Age groups under 65 years in Poland had patient care day rates ranging from 2 to 7.5 times U.S. rates for the respiratory disease category as a whole and from 5.6 to 37 times U.S. rates for bronchitis and emphysema. Greater hospital use for these respiratory diseases, especially in conjunction with greater hospital use and death rates for tuberculosis, suggests that the Polish population is at greater risk for lung disorders. However, it should be noted that the hospital fatality rate for respiratory diseases was higher in the United States, possibly indicating that U.S. patients hospitalized with respiratory diseases were more seriously ill than were Polish patients. Differing approaches to the treatment of respiratory diseases may also help explain differences in hospital use between the two countries.

Discharge rates were higher in Poland for patients 1–14 and 15–44 years of age for appendicitis, and Polish death rates for appendicitis also were higher. Polish patients 15–44 years of age had higher discharge and death rates for gastric and duodenal ulcers. Males 45–64 years of age were hospitalized twice as often in Poland as in the United States for the treatment of fractures. This age group had a higher death rate in Poland for accidents and adverse effects, although their death rate for motor vehicle accidents was higher in the United States. Polish patients 65 years of age and over had higher discharge and death rates for atherosclerosis, which, as was discussed earlier, probably reflects differences in the coding and classification of coronary atherosclerosis.

The finding of differences between Poland and the United States in the general pattern of hospital use and in hospital

use for specific conditions raises a number of questions for health researchers and policymakers. For example, in the United States the costs and benefits of the high frequency of hospitalization, particularly for the elderly, need to be examined further. Ambulatory care may be able to replace inpatient treatment for the less serious cases of conditions, such as diabetes mellitus and dislocations, sprains, and strains. Home health care programs may be able to substitute for some institutional care of the elderly.

In Poland, further exploration is needed of the costs and benefits of long hospitalizations, especially of children. New approaches to the treatment of such conditions as respiratory diseases may prove useful. Programs may be needed to deal with environmental hazards and to promote healthy lifestyles.

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Table 1. Midyear population estimates by sex and age: Poland and the United States, 1980

Age	Poland			United States		
	Both sexes	Male	Female	Both sexes	Male	Female
Number in thousands						
All ages	35,578	17,335	18,243	225,552	108,895	116,657
Under 1 year	689	353	336	3,548	1,815	1,733
1-14 years	7,950	4,066	3,885	47,722	24,393	23,330
1-4 years	2,564	1,311	1,253	12,900	6,597	6,303
5-14 years	5,386	2,755	2,632	34,822	17,795	17,027
15-44 years	16,187	8,190	7,997	104,126	51,203	52,923
15-24 years	6,112	3,134	2,978	41,605	20,645	20,960
25-34 years	6,119	3,095	3,024	36,920	18,105	18,815
35-44 years	3,956	1,961	1,995	25,601	12,453	13,148
45-64 years	7,155	3,338	3,817	44,448	21,121	23,328
45-54 years	4,276	2,063	2,213	22,696	10,948	11,749
55-64 years	2,879	1,275	1,604	21,752	10,173	11,579
65 years and over	3,598	1,389	2,209	25,708	10,363	15,345
65-74 years	2,376	978	1,398	15,648	6,787	8,861
75-84 years	1,052	365	687	7,787	2,886	4,901
85 years and over	170	46	124	2,274	691	1,583

Table 2. Death rates by sex and cause: Poland and the United States, 1980

Cause of death and ICD-9 code ¹	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 100,000 population						
All causes ²	984.3	878.3	1,091.5	976.9	882.5	785.3
Infectious and parasitic diseases 001-139	15.9	7.6	22.4	8.2	9.7	7.1
Intestinal infectious diseases 001-009	1.2	0.2	1.4	0.2	1.0	0.2
Tuberculosis 010-018	8.3	0.9	13.1	1.2	3.7	0.6
Meningococcal infection 036	0.1	0.2	0.2	0.2	0.1	0.2
Tetanus 037	0.1	0.0	0.1	0.0	0.1	0.0
Septicemia 038	3.5	4.2	4.1	4.3	2.9	4.1
Malignant neoplasms 140-208	167.8	183.9	191.4	205.3	145.4	163.6
Malignant neoplasm of stomach 151	25.4	6.3	33.1	7.7	18.0	5.0
Malignant neoplasm of colon 153	4.6	19.5	4.3	19.2	4.9	19.8
Malignant neoplasm of rectum, rectosigmoid junction and anus 154	8.2	4.0	8.3	4.4	8.1	3.6
Malignant neoplasm of trachea, bronchus and lung 162	33.6	45.8	58.5	68.6	9.9	24.3
Malignant neoplasm of female breast 174	9.7	15.7	...	...	18.9	30.6
Malignant neoplasm of cervix uteri 180	5.6	2.2	...	...	10.9	4.2
Leukemia 204-208	5.3	7.3	6.0	8.4	4.6	6.3
Diabetes mellitus 250	12.5	15.4	9.1	13.0	15.8	17.6
Nutritional marasmus 261	0.0	0.1	0.1	0.1	0.0	0.1
Anemias 280-285	0.9	1.4	0.8	1.3	1.0	1.6
Meningitis 320-322	1.4	0.6	1.8	0.7	1.0	0.5
Diseases of the circulatory system 390-459	474.4	438.5	485.3	459.9	464.0	418.2
Acute rheumatic fever 390-392	0.4	0.0	0.3	0.1	0.4	0.0
Chronic rheumatic heart disease 393-398	9.1	3.4	7.8	2.4	10.3	4.4
Hypertensive disease 401-405	20.4	14.4	15.4	12.7	25.2	16.0
Ischemic heart disease 410-414	91.8	249.7	125.7	282.4	59.7	218.9
Acute myocardial infarction 410	65.8	132.2	96.9	162.2	36.2	104.0
Cerebrovascular disease 430-438	65.4	75.1	58.4	63.6	72.0	86.1
Atherosclerosis 440	155.0	13.0	134.3	10.5	174.7	15.3
Pneumonia 480-486	21.8	22.9	23.6	24.2	20.1	21.7
Influenza 487	0.5	1.2	0.5	0.9	0.5	1.5
Bronchitis, emphysema and asthma 490-493	28.4	9.0	41.7	12.5	15.7	5.7
Ulcer of stomach and duodenum 531-533	5.8	2.7	8.3	3.1	3.4	2.3
Appendicitis 540-543	1.0	0.3	1.0	0.3	0.9	0.3
Chronic liver disease and cirrhosis 571	12.3	13.5	16.3	18.0	8.4	9.3
Nephritis, nephrotic syndrome and nephrosis 580-589	9.1	7.4	10.3	7.8	8.1	7.0
Hyperplasia of prostate 600	1.7	0.3	3.4	0.7	...	...
Direct obstetric deaths 640-646, 651-676	0.2	0.1	...	...	0.4	0.2
Congenital anomalies 740-759	11.8	6.2	13.2	6.8	10.4	5.5

See footnotes at end of table.

Table 2. Death rates by sex and cause: Poland and the United States, 1980—Con.

Cause of death and ICD-9 code ¹	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate per 100,000 population						
Certain conditions originating in the perinatal period 760-779	17.8	10.1	22.1	11.9	13.8	8.4
Birth trauma 767	3.8	0.5	5.1	0.6	2.7	0.4
Signs, symptoms and ill-defined conditions 780-799	77.4	12.7	71.9	15.0	82.7	10.6
Injury and poisoning 800-999	75.9	70.9	119.0	105.8	35.0	37.9
Accidents and adverse effects E800-E949	51.9	46.7	79.3	67.4	25.9	27.1
Motor vehicle traffic accidents E810-E819	7.7	22.9	12.2	34.5	3.4	12.0
Accidental falls E880-E888	4.5	5.9	5.1	6.4	3.9	5.4
Suicide E950-E959	10.7	11.9	18.2	18.6	3.6	5.5
Homicide E960-E969	0.9	10.6	1.2	17.1	0.6	4.5

¹Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death (based on the recommendations of the Ninth Revision Conference, 1975).²Includes causes not shown in table.

Table 3. Death rates by age and cause: Poland and the United States, 1980

Cause of death and ICD-9 code ¹	Under 1 year ²		1-14 years		15-44 years		45-64 years		65 years and over	
	Poland	United States	Poland	United States	Poland	United States	Poland	United States	Poland	United States
Rate per 100,000 population										
All causes ³	2,129.9	1,260.3	50.3	39.5	176.5	149.9	1,051.0	955.8	6,328.5	5,252.1
Infectious and parasitic diseases 001-139	206.4	19.3	2.2	1.1	3.2	1.5	20.6	8.6	56.7	41.7
Intestinal infectious diseases 001-009	56.8	3.5	0.3	0.1	0.0	0.0	0.1	0.2	0.2	0.9
Tuberculosis 010-018	-	0.1	0.0	0.0	2.2	0.2	15.0	1.4	42.2	4.7
Meningococcal infection 036	3.2	2.1	0.2	0.3	0.0	0.1	0.0	0.1	0.1	0.2
Tetanus 037	-	-	-	-	0.0	0.0	0.2	0.0	0.8	0.1
Septicemia 038	133.1	6.7	1.0	0.2	0.4	0.4	1.3	4.0	2.5	26.8
Malignant neoplasms 140-208	6.8	3.1	7.5	4.3	24.8	19.2	305.1	304.9	923.0	1,011.3
Malignant neoplasm of stomach 151	-	-	0.0	0.0	2.2	0.4	38.6	8.6	164.2	39.5
Malignant neoplasm of colon 153	-	-	0.0	0.0	0.5	1.1	6.8	24.4	29.9	126.3
Malignant neoplasm of rectum, rectosigmoid junction and anus 154	-	-	0.0	0.0	0.8	0.2	13.0	5.3	51.6	25.4
Malignant neoplasm of trachea, bronchus and lung 162	-	0.1	0.0	0.0	2.8	2.5	75.2	95.1	169.9	230.5
Malignant neoplasm of female breast 174	-	-	-	0.0	2.2	2.8	23.2	33.6	39.8	69.3
Malignant neoplasm of cervix uteri 180	-	-	0.0	-	2.0	0.8	12.8	4.5	21.0	8.0
Leukemia 204-208	1.4	0.9	2.9	1.8	1.9	2.1	7.6	8.5	22.2	38.0
Diabetes mellitus 250	0.1	0.1	0.0	0.1	1.4	1.5	16.1	17.9	85.9	98.7
Nutritional marasmus 261	0.4	0.2	-	0.0	-	0.0	0.1	0.1	0.2	0.9
Anemias 280-285	1.3	0.7	0.1	0.3	0.2	0.4	1.2	0.9	5.2	8.9
Meningitis 320-322	32.2	12.3	0.5	0.6	0.6	0.1	1.2	0.5	2.0	1.3
Diseases of the circulatory system 390-459	36.6	28.8	1.5	1.8	35.2	19.5	415.6	395.3	3,695.6	3,111.1
Acute rheumatic fever 390-392	-	-	0.0	0.0	0.2	0.0	0.6	0.1	1.4	0.2
Chronic rheumatic heart disease 393-398	1.0	0.1	0.1	0.1	3.9	0.5	21.8	5.6	28.3	18.1
Hypertensive disease 401-405	-	0.1	0.0	0.0	1.3	0.9	24.6	14.9	147.3	98.2
Ischemic heart disease 410-414	-	0.8	0.1	0.1	13.4	8.4	154.0	249.2	541.2	1,745.2
Acute myocardial infarction 410	-	0.6	-	0.1	12.0	5.6	130.3	165.8	337.9	860.4
Cerebrovascular disease 430-438	8.1	4.3	0.4	0.3	5.2	3.4	64.2	44.7	492.7	573.1
Atherosclerosis 440	-	0.1	-	-	1.3	0.1	48.6	2.9	1,430.2	109.9
Pneumonia 480-486	183.2	27.7	2.6	0.9	2.4	1.7	12.6	12.7	138.7	168.5
Influenza 487	3.3	0.3	0.1	0.0	0.0	0.1	0.2	0.3	3.5	9.7
Bronchitis, emphysema and asthma 490-493	4.5	1.5	0.1	0.2	0.9	0.5	25.1	10.2	225.3	59.6
Ulcer of stomach and duodenum 531-533	0.1	0.3	0.0	0.0	1.1	0.2	8.6	2.8	35.0	18.1
Appendicitis 540-543	0.3	0.3	0.2	0.1	0.3	0.1	1.2	0.4	5.1	1.6
Chronic liver disease and cirrhosis 571	0.6	0.9	0.2	0.0	2.3	4.7	25.4	36.2	59.9	37.3
Nephritis, nephrotic syndrome and nephrosis 580-589	2.6	6.2	0.5	0.1	2.9	0.7	14.3	6.2	47.6	50.8
Hyperplasia of prostate 600	-	-	-	-	-	-	0.5	0.1	15.5	2.8
Direct obstetric deaths 640-646, 651-676	...	...	-	-	0.4	0.2	0.0	0.0	...	...
Congenital anomalies 740-759	507.7	255.2	5.0	3.3	1.0	1.3	0.8	2.0	1.3	3.3
Certain conditions originating in the perinatal period 760-779	915.8	629.7	-	0.2	-	0.0	-	0.0	-	0.0
Birth trauma 767	197.4	29.3	-	0.0	-	-	-	0.0	-	-
Signs, symptoms and ill-defined conditions 780-799	45.7	168.5	1.4	0.9	10.6	3.1	43.1	12.4	620.5	52.6

See footnotes at end of table.

Table 3. Death rates by age and cause: Poland and the United States, 1980—Con.

Cause of death and ICD-9 code ¹	Under 1 year ²		1-14 years		15-44 years		45-64 years		65 years and over	
	United		United		United		United		United	
	Poland	States	Poland	States	Poland	States	Poland	States	Poland	States
Rate per 100,000 population										
Injury and poisoning 800-999	56.8	40.0	20.4	20.1	75.7	83.6	97.0	67.6	161.5	122.4
Accidents and adverse effects E800-E949	48.0	32.3	16.2	17.9	48.4	50.3	61.7	40.8	128.0	97.2
Motor vehicle traffic accidents E810-E819	0.3	6.4	2.4	7.5	8.4	32.9	9.6	17.6	13.7	22.0
Accidental falls E880-E888	0.1	1.2	0.4	0.4	1.9	1.5	4.2	4.8	26.8	36.6
Suicide E950-E959	-	-	0.6	0.3	12.6	14.3	17.2	15.9	13.9	17.8
Homicide E960-E969	1.6	5.8	0.1	1.5	1.1	16.7	1.1	9.0	1.3	5.5

¹Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death (based on the recommendations of the Ninth Revision Conference, 1975).²Rates per 100,000 live births.³Includes causes not shown in table.**Table 4. Rates of discharge and days of care for inpatients discharged from hospitals by sex and diagnosis: Poland and the United States, 1980**

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries. Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	United		United		United	
	Poland	States	Poland	States	Poland	States
Discharge rate per 1,000 population						
All conditions	102.2	164.7	97.4	144.0	106.7	184.1
Infectious and parasitic diseases 001-139	5.3	2.9	6.2	2.9	4.5	2.9
Intestinal infectious diseases 001-009	1.3	0.6	1.4	0.6	1.1	0.6
Tuberculosis 010-018	1.2	0.1	1.8	0.2	0.7	*0.1
Viral hepatitis 070	1.4	0.1	1.4	0.1	1.4	0.1
Neoplasms 140-239	6.1	11.0	5.4	9.5	6.7	12.5
Malignant neoplasms 140-208	4.5	8.1	4.7	8.0	4.2	8.2
Malignant neoplasm of stomach 151	0.4	0.2	0.5	0.2	0.3	0.1
Malignant neoplasm of other digestive organs and peritoneum 150, 152-159	0.6	1.3	0.6	1.3	0.6	1.2
Malignant neoplasm of trachea, bronchus and lung 162	0.7	1.2	1.1	1.7	0.2	0.7
Malignant neoplasm of breast 174-175	0.4	0.9	0.0	*	0.8	1.8
Malignant neoplasm of cervix uteri 180	0.3	0.2	...	...	0.7	0.4
Malignant neoplasm of other female genital organs 179, 181-184	0.3	0.6	...	...	0.6	1.1
Malignant neoplasm of prostate 185	0.1	0.6	0.2	1.2	...	...
Leukemia 204-208	0.3	0.3	0.3	0.3	0.2	0.2
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior 210-239	1.6	2.9	0.7	1.4	2.5	4.3
Benign neoplasm of uterus 218-219	0.6	0.8	...	...	1.2	1.5
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	1.8	5.1	1.3	3.6	2.3	6.4
Diabetes mellitus 250	1.0	2.9	0.9	2.3	1.1	3.4
Diseases of blood and blood-forming organs 280-289	0.6	1.5	0.6	1.3	0.7	1.6
Mental disorders 290-319	1.1	7.5	1.0	8.1	1.1	6.9
Diseases of the nervous system and sense organs 320-389	4.8	7.8	5.3	7.3	4.4	8.3
Disorders of the autonomic nervous system 337	0.0	*	0.0	*	0.0	*
Other disorders of the central nervous system 320-336, 340-349	1.3	1.8	1.6	1.8	1.1	1.8
Disorders of the peripheral nervous system 350-359	0.8	1.0	1.0	0.8	0.7	1.2
Cataract 366	0.3	1.9	0.3	1.6	0.4	2.2
Other disorders of the eye and adnexa 360-365, 367-379	1.3	1.3	1.3	1.2	1.3	1.4
Diseases of the ear and mastoid process 380-389	1.0	1.8	1.1	1.9	0.8	1.7
Diseases of the circulatory system 390-459	13.4	22.8	14.7	23.8	12.2	21.9
Rheumatic heart disease 390-398	0.9	0.3	0.7	0.2	1.0	0.4
Essential hypertension 401	1.2	1.4	1.0	1.1	1.4	1.6
Hypertensive heart and renal disease 402-404	0.6	0.7	0.5	0.6	0.7	0.8
Acute myocardial infarction 410	1.1	1.9	1.6	2.5	0.6	1.4
Other acute and subacute forms of ischemic heart disease 411	0.5	0.7	0.7	0.7	0.4	0.7
Angina pectoris 413	0.4	0.9	0.5	1.1	0.3	0.8
Other chronic ischemic heart disease 412, 414	1.4	4.4	1.7	5.4	1.1	3.4
Diseases of pulmonary circulation 415-417	0.6	0.4	1.0	0.3	0.3	0.4
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders 420-426	0.8	0.8	0.8	0.9	0.8	0.8
Cardiac dysrhythmias 427	0.4	1.7	0.5	1.7	0.4	1.8
Heart failure 428	0.8	1.9	0.9	1.7	0.8	2.1
Ill-defined descriptions and complications of heart disease 429	0.2	0.6	0.2	0.7	0.3	0.6
Acute cerebrovascular disease 430-436	1.1	2.8	1.1	2.8	1.1	2.9
Atherosclerosis 440	1.9	0.5	2.0	0.5	1.7	0.4
Other diseases of arteries, arterioles and capillaries 441-448	0.3	0.9	0.4	1.1	0.2	0.7
Diseases of veins and lymphatics, and other diseases of the circulatory system 451-459	0.9	2.2	0.9	2.1	1.0	2.4

Table 4. Rates of discharge and days of care for inpatients discharged from hospitals by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries. Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Discharge rate per 1,000 population						
Diseases of the respiratory system 460-519	13.6	15.3	16.4	16.1	10.9	14.5
Acute respiratory infections 460-466	2.7	2.3	3.2	2.3	2.3	2.3
Chronic disease of tonsils and adenoids 474	1.0	2.0	1.0	1.8	0.9	2.3
Other diseases of upper respiratory tract 470-473, 475-478	1.4	1.3	1.8	1.4	1.1	1.2
Pneumonia 480-486	4.4	3.5	5.3	3.8	3.5	3.2
Influenza 487	0.1	0.4	0.1	0.4	0.1	0.5
Bronchitis and emphysema 490-492	2.8	1.4	3.5	1.6	2.0	1.2
Asthma 493	0.7	1.8	0.7	1.7	0.6	2.0
Diseases of the digestive system 520-579	13.4	20.7	14.1	20.0	12.7	21.3
Diseases of oral cavity, salivary glands and jaw 520-529	0.3	1.2	0.3	1.1	0.2	1.4
Gastric and duodenal ulcer 531-532	2.0	1.2	2.9	1.3	1.1	1.0
Other diseases of esophagus, stomach and duodenum 530, 533-537	1.5	2.7	1.7	2.6	1.4	2.9
Appendicitis 540-543	2.6	1.2	2.5	1.3	2.6	1.0
Hernia of abdominal cavity 550-553	1.6	3.7	2.5	5.3	0.8	2.1
Noninfective enteritis and colitis 555-558	0.7	2.8	0.7	2.3	0.7	3.1
Other diseases of intestines and peritoneum 560-569	1.0	3.3	1.0	2.5	1.0	4.1
Chronic liver disease and cirrhosis 571	0.4	0.5	0.5	0.6	0.3	0.4
Disorders of gall bladder and biliary tract 574-576	2.7	2.7	1.3	1.5	4.1	3.8
Other diseases of digestive system 570, 572-573, 577-579	0.7	1.4	0.6	1.5	0.7	1.4
Diseases of the genitourinary system 580-629	9.9	16.0	5.5	10.1	14.1	21.4
Diseases of urinary system 580-599	4.1	5.5	3.8	5.4	4.3	5.6
Diseases of male genital organs 600-608	0.8	2.2	1.7	4.5	...	...
Disorders of breast 610-611	0.1	1.0	0.0	0.2	0.1	1.7
Inflammatory disease of female pelvic organs 614-616	0.9	1.4	...	...	1.8	2.6
Disorders of menstruation and other abnormal bleeding from female genital tract 626	1.5	2.0	...	...	3.0	3.8
Complications of pregnancy, childbirth and the puerperium 630-676	10.5	13.0	...	...	20.5	25.0
Induced abortion 635-636	1.7	0.7	...	...	3.3	1.4
Other pregnancy with abortive outcome 630-634, 637-639	2.3	1.6	...	...	4.5	3.1
Complications of labor, delivery and the puerperium 652-676	2.1	7.0	...	...	4.0	13.6
Diseases of the skin and subcutaneous tissue 680-709	2.6	2.7	2.9	2.7	2.2	2.7
Diseases of the musculoskeletal system and connective tissue 710-739	3.5	10.0	3.5	8.9	3.5	11.0
Osteoarthritis and allied disorders 715	0.6	0.8	0.4	0.5	0.8	1.1
Other arthropathies and related disorders 710-714, 716-719	0.9	1.6	0.7	1.5	1.0	1.7
Intervertebral disc disorders 722	0.5	1.7	0.6	1.9	0.4	1.5
Other dorsopathies 720-721, 723-724	0.7	1.9	0.8	1.8	0.6	2.0
Rheumatism, excluding the back 725-729	0.3	1.9	0.4	1.6	0.2	2.2
Disorders of bone and cartilage 730-733	0.3	1.3	0.5	1.1	0.2	1.4
Congenital anomalies 740-759	1.0	1.9	1.1	1.9	0.9	1.9
Certain conditions originating in the perinatal period 760-779	0.5	4.1	0.6	4.5	0.5	3.7
Symptoms, signs and ill-defined conditions 780-799	1.6	2.9	1.7	2.8	1.6	3.1
Injury and poisoning 800-999	11.8	15.9	16.9	18.6	6.9	13.5
Fractures 800-829	4.7	5.2	6.8	5.3	2.8	5.0
Dislocations, sprains and strains 830-848	0.6	2.9	0.9	3.6	0.3	2.3
Intracranial injury, excluding those with skull fracture 850-854	0.8	1.3	1.2	1.6	0.5	1.0
Open wound and injury to blood vessels 870-904	1.4	1.5	2.2	2.3	0.5	0.7
Burns 940-949	0.7	0.4	0.9	0.6	0.5	0.2
Poisoning and toxic effects 960-989	0.9	0.9	1.0	0.9	0.9	0.9
Complications of surgical and medical care not elsewhere classified 996-999	0.1	1.1	0.1	1.1	0.1	1.2
Supplementary classification of factors influencing health status and contact with health services V01-V82	0.8	3.6	0.5	1.7	1.0	5.4
Rate of days of care per 1,000 population						
All conditions	1,677.6	1,226.9	1,758.8	1,099.9	1,600.5	1,345.4
Infectious and parasitic diseases 001-139	181.9	20.1	231.7	19.0	134.6	21.2
Intestinal infectious diseases 001-009	18.6	2.7	21.0	2.4	16.3	3.0
Tuberculosis 010-018	92.3	1.9	133.9	2.7	52.8	*1.1
Viral hepatitis 070	43.7	0.9	44.3	0.9	43.1	1.0
Neoplasms 140-239	136.9	115.4	132.7	104.7	140.8	125.4
Malignant neoplasms 140-208	110.6	97.6	119.5	96.6	102.1	98.5
Malignant neoplasm of stomach 151	7.9	2.5	9.8	3.1	6.1	2.0
Malignant neoplasm of other digestive organs and peritoneum 150, 152-159	15.4	20.4	14.6	19.5	16.2	21.2
Malignant neoplasm of trachea, bronchus and lung 162	21.7	15.2	37.6	21.5	6.5	9.3
Malignant neoplasm of breast 174-175	9.1	10.3	0.2	*	17.5	19.9
Malignant neoplasm of cervix uteri 180	8.2	1.9	...	...	15.9	3.7
Malignant neoplasm of other female genital organs 179, 181-184	7.1	5.3	...	...	13.8	10.2
Malignant neoplasm of prostate 185	1.7	6.1	3.6	12.7	...	...
Leukemia 204-208	5.5	3.2	6.4	3.8	4.6	2.7

Table 4. Rates of discharge and days of care for inpatients discharged from hospitals by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries. Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate of days of care per 1,000 population						
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior	210-239	26.3	17.8	13.2	8.1	26.9
Benign neoplasm of uterus	218-219	9.7	5.5	...	...	10.6
Endocrine, nutritional and metabolic diseases and immunity disorders	240-279	34.5	48.7	25.2	34.0	62.6
Diabetes mellitus	250	19.9	29.9	17.0	22.8	36.6
Diseases of blood and blood-forming organs	280-289	10.1	10.8	8.3	8.7	12.8
Mental disorders	290-319	12.9	86.8	12.0	89.2	84.7
Diseases of the nervous system and sense organs	320-389	93.9	42.7	100.7	40.4	44.9
Disorders of the autonomic nervous system	337	0.2	*	0.1	*	*
Other disorders of the central nervous system	320-336, 340-349	30.9	19.4	34.1	20.0	18.9
Disorders of the peripheral nervous system	350-359	16.0	5.4	18.0	4.4	6.3
Cataract	366	8.1	6.8	7.3	5.5	8.1
Other disorders of the eye and adnexa	360-365, 367-379	23.9	5.2	24.2	4.8	5.7
Diseases of the ear and mastoid process	380-389	14.8	5.7	17.0	5.5	5.9
Diseases of the circulatory system	390-459	251.7	228.2	274.8	229.0	227.4
Rheumatic heart disease	390-398	17.3	2.7	14.5	1.5	3.9
Essential hypertension	401	17.4	9.4	13.8	7.0	11.7
Hypertensive heart and renal disease	402-404	9.5	7.0	7.7	5.3	8.6
Acute myocardial infarction	410	24.0	24.1	35.1	30.7	17.9
Other acute and subacute forms of ischemic heart disease	411	8.1	5.6	10.0	5.3	5.8
Angina pectoris	413	5.4	5.5	6.7	5.6	5.4
Other chronic ischemic heart disease	412, 414	22.5	40.8	26.3	47.3	34.8
Diseases of pulmonary circulation	415-417	13.8	4.4	22.4	3.7	5.0
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders	420-426	15.6	7.9	15.2	8.2	7.6
Cardiac dysrhythmias	427	5.6	13.2	5.7	12.4	14.0
Heart failure	428	14.5	19.7	13.9	17.5	21.7
Ill-defined descriptions and complications of heart disease	429	4.3	6.0	3.9	5.5	6.5
Acute cerebrovascular disease	430-436	23.3	36.4	23.3	34.1	38.6
Atherosclerosis	440	39.6	6.5	44.2	7.4	5.7
Other diseases of arteries, arterioles and capillaries	441-448	8.0	11.8	11.0	14.1	9.6
Diseases of veins and lymphatics, and other diseases of the circulatory system	451-459	17.1	18.6	15.3	16.2	20.9
Diseases of the respiratory system	460-519	240.4	96.2	300.1	102.1	90.7
Acute respiratory infections	460-466	26.6	10.8	30.3	10.2	11.4
Chronic disease of tonsils and adenoids	474	8.6	3.9	8.8	3.3	4.4
Other diseases of upper respiratory tract	470-473, 475-478	19.5	4.5	24.3	4.5	4.6
Pneumonia	480-486	82.0	28.9	100.8	31.3	26.7
Influenza	487	0.7	2.4	0.7	1.8	3.0
Bronchitis and emphysema	490-492	68.0	10.3	89.6	11.6	9.1
Asthma	493	16.5	10.8	18.8	9.2	12.3
Diseases of the digestive system	520-579	191.4	143.6	196.7	129.4	156.9
Diseases of oral cavity, salivary glands and jaw	520-529	3.1	3.4	3.4	2.9	3.9
Gastric and duodenal ulcer	531-532	35.9	10.4	51.2	11.4	9.5
Other diseases of esophagus, stomach and duodenum	530, 533-537	16.7	16.6	18.3	15.4	17.8
Appendicitis	540-543	28.0	6.5	27.8	7.4	5.6
Hernia of abdominal cavity	550-553	19.9	20.3	29.1	26.2	14.9
Noninfective enteritis and colitis	555-558	8.2	15.3	8.7	12.1	18.4
Other diseases of intestines and peritoneum	560-569	12.4	26.5	12.8	18.5	34.0
Chronic liver disease and cirrhosis	571	9.0	6.0	12.0	6.7	5.4
Disorders of gall bladder and biliary tract	574-576	46.0	25.2	22.2	15.2	34.5
Other diseases of digestive system	570, 572-573, 577-579	12.3	13.2	11.2	13.6	12.9
Diseases of the genitourinary system	580-629	102.4	89.0	71.4	64.3	112.1
Diseases of urinary system	580-599	52.6	35.2	44.4	33.2	37.1
Diseases of male genital organs	600-608	13.1	14.8	26.9	30.6	...
Disorders of breast	610-611	0.8	3.3	0.2	0.6	5.9
Inflammatory disease of female pelvic organs	614-616	9.8	7.0	...	...	13.6
Disorders of menstruation and other abnormal bleeding from female genital tract	626	6.9	6.6	...	...	12.8
Complications of pregnancy, childbirth and the puerperium	630-676	75.0	49.3	...	...	95.2
Induced abortion	635-636	3.2	1.1	...	...	2.1
Other pregnancy with abortive outcome	630-634, 637-639	11.0	3.9	...	...	7.5
Complications of labor, delivery and the puerperium	652-676	20.2	29.4	...	...	56.8
Diseases of the skin and subcutaneous tissue	680-709	48.8	21.4	50.8	20.3	22.4
Diseases of the musculoskeletal system and connective tissue	710-739	87.1	82.9	80.6	67.9	96.9
Osteoarthritis and allied disorders	715	15.0	9.8	9.2	6.0	13.4
Other arthropathies and related disorders	710-714, 716-719	24.0	12.8	15.9	8.8	16.6
Intervertebral disc disorders	722	12.7	16.8	14.6	17.9	15.8
Other dorsopathies	720-721, 723-724	16.0	16.7	18.6	15.2	18.1
Rheumatism, excluding the back	725-729	4.6	8.9	5.5	6.7	11.1
Disorders of bone and cartilage	730-733	9.3	13.9	13.1	11.0	16.5
Congenital anomalies	740-759	22.1	11.7	20.4	11.6	11.7

Table 4. Rates of discharge and days of care for inpatients discharged from hospitals by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants and normal deliveries. Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

		Both sexes		Male		Female	
		Poland	United States	Poland	United States	Poland	United States
Diagnosis and ICD-9 code							
Rate of days of care per 1,000 population							
Certain conditions originating in the perinatal period	760-779	7.4	31.9	7.5	32.2	7.2	31.7
Symptoms, signs and ill-defined conditions	780-799	15.6	13.2	15.9	12.1	15.2	14.3
Injury and poisoning	800-999	158.8	122.6	224.1	128.1	96.7	117.6
Fractures	800-829	83.6	55.8	113.8	48.4	54.9	62.8
Dislocations, sprains and strains	830-848	7.7	17.3	12.2	19.8	3.6	15.1
Intracranial injury, excluding those with skull fracture	850-854	10.0	7.4	14.8	9.9	5.3	5.0
Open wound and injury to blood vessels	870-904	16.2	7.6	26.2	11.8	6.7	3.8
Burns	940-949	12.2	5.7	16.4	7.4	8.2	4.1
Poisoning and toxic effects	960-989	4.7	3.7	4.9	3.7	4.5	3.8
Complications of surgical and medical care not elsewhere classified	996-999	1.1	9.5	1.1	9.5	1.2	9.6
Supplementary classification of factors influencing health status and contact with health services	V01-V82	6.9	12.2	5.5	7.1	8.2	17.0

Table 5. Rates of discharge and days of care for patients under 1 year of age, by sex and diagnosis: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants (codes V30-V39). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female		
	Poland	United States	Poland	United States	Poland	United States	
Discharge rate per 1,000 live births							
All conditions	298.3	506.8	328.8	538.5	266.0	473.3	
Infectious and parasitic diseases	001-139	49.2	19.7	53.9	19.4	44.2	19.9
Intestinal infectious diseases	001-009	42.3	5.9	46.0	6.0	38.4	5.7
Tuberculosis	010-018	*	-	-	-	*	-
Viral hepatitis	070	0.5	*	0.6	-	0.4	*
Neoplasms	140-239	1.2	5.1	1.1	5.4	1.4	*4.8
Malignant neoplasms	140-208	0.3	*1.6	0.3	*	*	*
Malignant neoplasm of stomach	151	-	*	-	-	-	*
Malignant neoplasm of other digestive organs and peritoneum	150, 152-159	-	*	-	*	-	-
Malignant neoplasm of trachea, bronchus and lung	162	-	-	-	-	-	-
Malignant neoplasm of breast	174-175	-	*	-	-	-	*
Malignant neoplasm of cervix uteri	180	-	*	...	...	-	*
Malignant neoplasm of other female genital organs	179, 181-184	-	*	...	...	-	*
Malignant neoplasm of prostate	185	-	*	-	*	...	...
Leukemia	204-208	*	*	*	*	*	*
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior	210-239	0.9	3.5	0.7	*3.8	1.2	*3.2
Benign neoplasm of uterus	218-219	*	-	...	...	*	-
Endocrine, nutritional and metabolic diseases and immunity disorders	240-279	2.2	4.2	2.4	*4.5	2.0	*3.8
Diabetes mellitus	250	*	*	*	*	*	*
Diseases of blood and blood-forming organs	280-289	3.5	*2.0	3.7	*	3.3	*
Mental disorders	290-319	*	*	*	*	*	*
Diseases of the nervous system and sense organs	320-389	17.2	21.4	18.7	23.0	15.7	19.7
Disorders of the autonomic nervous system	337	-	*	-	-	-	*
Other disorders of the central nervous system	320-336, 340-349	4.4	5.0	5.0	5.6	3.8	*4.4
Disorders of the peripheral nervous system	350-359	0.2	*	*	*	*	*
Cataract	366	*	*	-	*	*	*
Other disorders of the eye and adnexa	360-365, 367-379	1.1	3.8	1.0	*3.4	1.3	*4.2
Diseases of the ear and mastoid process	380-389	11.5	11.3	12.4	12.7	10.5	9.7
Diseases of the circulatory system	390-459	0.9	8.0	1.1	6.8	0.8	9.2
Rheumatic heart disease	390-398	*	-	*	-	*	-
Essential hypertension	401	-	*	-	*	-	*
Hypertensive heart and renal disease	402-404	-	*	-	*	-	*
Acute myocardial infarction	410	-	*	-	*	-	*
Other acute and subacute forms of ischemic heart disease	411	-	-	-	-	-	-
Angina pectoris	413	-	*	-	-	-	*
Other chronic ischemic heart disease	412, 414	-	*	-	*	-	*
Diseases of pulmonary circulation	415-417	-	*	-	*	-	-
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders	420-426	0.5	*	0.5	*	0.5	*
Cardiac dysrhythmias	427	*	*1.9	*	*	-	*
Heart failure	428	*	*	-	*	*	*

Table 5. Rates of discharge and days of care for patients under 1 year of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants (codes V30–V39). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Discharge rate per 1,000 live births						
Ill-defined descriptions and complications of heart disease 429	*	*	*	*	-	*
Acute cerebrovascular disease 430–436	*	*	*	*	*	*
Atherosclerosis 440	-	*	-	*	-	-
Other diseases of arteries, arterioles and capillaries 441–448	*	*	-	*	*	*
Diseases of veins and lymphatics, and other diseases of the circulatory system 451–459	*	*	*	*	-	*
Diseases of the respiratory system 460–519	136.2	59.6	156.9	71.4	114.3	47.2
Acute respiratory infections 460–466	29.5	26.6	32.8	31.4	25.9	21.7
Chronic disease of tonsils and adenoids 474	0.2	*	*	*	*	*
Other diseases of upper respiratory tract 470–473, 475–478	1.1	*	1.1	*	1.1	*
Pneumonia 480–486	82.2	19.9	94.9	24.3	68.8	15.3
Influenza 487	0.3	*	0.3	*	*	*
Bronchitis and emphysema 490–492	21.3	4.5	25.6	*5.1	16.7	*3.9
Asthma 493	0.8	3.3	1.0	*4.4	0.5	*
Diseases of the digestive system 520–579	23.7	43.6	27.8	50.9	19.4	36.0
Diseases of oral cavity, salivary glands and jaw 520–529	0.6	*	0.5	*	0.7	*
Gastric and duodenal ulcer 531–532	*	*	*	*	*	-
Other diseases of esophagus, stomach and duodenum 530, 533–537	4.6	4.2	5.0	5.4	4.1	*
Appendicitis 540–543	0.2	*	*	*	*	-
Hernia of abdominal cavity 550–553	3.4	10.1	6.0	15.7	0.8	*4.3
Noninfective enteritis and colitis 555–558	7.3	23.6	7.8	24.5	6.7	22.7
Other diseases of intestines and peritoneum 560–569	6.3	*2.0	6.6	*	5.9	*
Chronic liver disease and cirrhosis 571	*	*	*	*	*	-
Disorders of gall bladder and biliary tract 574–576	0.2	*	*	*	*	*
Other diseases of digestive system 570, 572–573, 577–579	1.0	*1.6	1.1	*	0.9	*
Diseases of the genitourinary system 580–629	4.8	5.7	3.6	6.8	6.1	*4.4
Diseases of urinary system 580–599	4.4	*2.6	2.9	*	5.9	*3.2
Diseases of male genital organs 600–608	0.4	*2.4	0.7	*4.8	...	...
Disorders of breast 610–611	*	*	*	*	*	*
Inflammatory disease of female pelvic organs 614–616	*	*	...	...	*	*
Disorders of menstruation and other abnormal bleeding from female genital tract 626	-	*	...	...	-	*
Complications of pregnancy, childbirth and the puerperium 630–676	...	...	...	...	...	...
Induced abortion 635–636	...	...	...	...	...	...
Other pregnancy with abortive outcome 630–634, 637–639	...	...	...	...	...	...
Complications of labor, delivery and the puerperium 652–676	...	...	...	...	...	...
Diseases of the skin and subcutaneous tissue 680–709	6.1	5.1	6.1	*4.7	6.1	*5.4
Diseases of the musculoskeletal system and connective tissue 710–739	0.5	3.5	0.5	*	0.6	*4.6
Osteoarthritis and allied disorders 715	*	*	-	-	*	*
Other arthropathies and related disorders 710–714, 716–719	*	*1.4	*	*	*	*
Intervertebral disc disorders 722	-	*	-	*	-	*
Other dorsopathies 720–721, 723–724	*	*	-	*	*	*
Rheumatism, excluding the back 725–729	-	*	-	*	-	*
Disorders of bone and cartilage 730–733	0.4	*	0.4	*	0.4	*
Congenital anomalies 740–759	13.3	41.5	13.3	42.1	13.2	40.7
Certain conditions originating in the perinatal period 760–779	27.2	254.9	27.0	265.0	27.4	244.2
Symptoms, signs and ill-defined conditions 780–799	3.4	13.5	3.3	13.6	3.5	13.4
Injury and poisoning 800–999	5.6	10.1	6.5	10.3	4.6	9.9
Fractures 800–829	1.0	*2.7	1.0	*	0.9	*3.4
Dislocations, sprains and strains 830–848	*	*	*	*	*	*
Intracranial injury, excluding those with skull fracture 850–854	0.4	*	0.5	*	0.3	*
Open wound and injury to blood vessels 870–904	0.2	*	*	*	*	*
Burns 940–949	2.1	*	2.5	*	1.7	*
Poisoning and toxic effects 960–989	0.7	*	0.7	*	0.7	*
Complications of surgical and medical care not elsewhere classified 996–999	*	*	*	*	*	*
Supplementary classification of factors influencing health status and contact with health services V01–V82	3.1	8.0	2.8	8.3	3.4	7.7
Rate of days of care per 1,000 live births						
All conditions	4,766.1	3,284.8	5,265.2	3,260.1	4,238.9	3,310.7
Infectious and parasitic diseases 001–139	877.8	100.9	954.2	99.2	797.1	102.8
Intestinal infectious diseases 001–009	714.6	27.5	773.1	28.2	652.8	26.9
Tuberculosis 010–018	*	-	-	-	*	-
Viral hepatitis 070	20.4	*	24.2	-	16.4	*

Table 5. Rates of discharge and days of care for patients under 1 year of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants (codes V30–V39). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female		
	Poland	United States	Poland	United States	Poland	United States	
Rate of days of care per 1,000 live births							
Neoplasms	140-239	24.5	31.7	23.8	28.8	25.3	*34.8
Malignant neoplasms	140-208	7.5	*14.1	11.6	*	*	*
Malignant neoplasm of stomach	151	-	*	-	*	-	*
Malignant neoplasm of other digestive organs and peritoneum	150, 152-159	-	*	-	*	-	-
Malignant neoplasm of trachea, bronchus and lung	162	-	-	-	-	-	-
Malignant neoplasm of breast	174-175	-	*	-	-	-	*
Malignant neoplasm of cervix uteri	180	-	*	...	...	-	*
Malignant neoplasm of other female genital organs	179, 181-184	-	*	...	...	-	*
Malignant neoplasm of prostate	185	-	*	-	*	...	...
Leukemia	204-208	*	*	*	*	*	*
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior	210-239	17.1	17.6	12.3	*17.9	22.1	*17.4
Benign neoplasm of uterus	218-219	*	-	...	...	*	-
Endocrine, nutritional and metabolic diseases and immunity disorders	240-279	53.7	38.9	63.2	*37.9	43.8	*40.0
Diabetes mellitus	250	*	*	*	*	*	*
Diseases of blood and blood-forming organs	280-289	37.8	*12.9	44.5	*	30.7	*
Mental disorders	290-319	*	*	*	*	*	*
Diseases of the nervous system and sense organs	320-389	274.3	108.8	293.0	124.0	254.6	92.9
Disorders of the autonomic nervous system	337	-	*	-	-	-	*
Other disorders of the central nervous system	320-336, 340-349	104.9	52.9	116.0	61.7	93.1	*43.5
Disorders of the peripheral nervous system	350-359	9.0	*	*	*	*	*
Cataract	366	*	*	-	*	*	*
Other disorders of the eye and adnexa	360-365, 367-379	11.2	10.9	11.5	*11.1	10.9	*10.8
Diseases of the ear and mastoid process	380-389	148.7	38.2	156.9	44.4	140.1	31.7
Diseases of the circulatory system	390-459	21.7	59.6	19.4	51.8	24.2	67.8
Rheumatic heart disease	390-398	*	-	*	-	*	-
Essential hypertension	401	-	*	-	*	-	*
Hypertensive heart and renal disease	402-404	-	*	-	*	-	*
Acute myocardial infarction	410	-	*	-	*	-	*
Other acute and subacute forms of ischemic heart disease	411	-	-	-	-	-	-
Angina pectoris	413	-	*	-	-	-	*
Other chronic ischemic heart disease	412, 414	-	*	-	*	-	*
Diseases of pulmonary circulation	415-417	-	*	-	*	-	-
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders	420-426	12.2	*	10.8	*	13.8	*
Cardiac dysrhythmias	427	*	*11.0	*	*	-	*
Heart failure	428	*	*	-	*	*	*
Ill-defined descriptions and complications of heart disease	429	*	*	*	*	-	*
Acute cerebrovascular disease	430-436	*	*	*	*	*	*
Atherosclerosis	440	-	*	-	*	-	-
Other diseases of arteries, arterioles and capillaries	441-448	*	*	-	*	*	*
Diseases of veins and lymphatics, and other diseases of the circulatory system	451-459	*	*	*	*	-	*
Diseases of the respiratory system	460-519	2,186.3	288.4	2,569.0	352.7	1,782.0	220.7
Acute respiratory infections	460-466	322.6	114.7	362.6	136.0	280.4	92.3
Chronic disease of tonsils and adenoids	474	1.6	*	*	*	*	*
Other diseases of upper respiratory tract	470-473, 475-478	9.2	*	10.7	*	7.5	*
Pneumonia	480-486	1,493.9	108.3	1,749.1	136.7	1,224.4	78.4
Influenza	487	1.7	*	1.9	*	*	*
Bronchitis and emphysema	490-492	329.5	21.8	405.9	*26.0	248.8	*17.4
Asthma	493	10.7	17.4	13.7	*24.0	7.6	*
Diseases of the digestive system	520-579	312.0	219.9	361.0	237.9	260.2	200.9
Diseases of oral cavity, salivary glands and jaw	520-529	4.5	*	4.5	*	4.5	*
Gastric and duodenal ulcer	531-532	*	*	*	*	*	-
Other diseases of esophagus, stomach and duodenum	530, 533-537	44.1	20.4	47.8	27.3	40.3	*
Appendicitis	540-543	1.5	*	*	*	*	-
Hernia of abdominal cavity	550-553	31.1	32.3	53.5	49.6	7.4	*14.0
Noninfective enteritis and colitis	555-558	109.8	126.0	118.5	120.1	100.6	132.3
Other diseases of intestines and peritoneum	560-569	84.9	*13.4	92.4	*	77.0	*
Chronic liver disease and cirrhosis	571	*	*	*	*	*	-
Disorders of gall bladder and biliary tract	574-576	2.6	*	*	*	*	*
Other diseases of digestive system	570, 572-573, 577-579	30.1	*16.1	32.1	*	28.0	*
Diseases of the genitourinary system	580-629	113.5	24.2	81.0	25.2	147.9	*23.1
Diseases of urinary system	580-599	110.1	*16.0	77.1	*	144.9	*19.0
Diseases of male genital organs	600-608	2.0	*5.8	3.8	*11.3	...	...
Disorders of breast	610-611	*	*	*	*	*	*
Inflammatory disease of female pelvic organs	614-616	*	*	...	...	*	*
Disorders of menstruation and other abnormal bleeding from female genital tract	626	-	*	...	...	-	*

Table 5. Rates of discharge and days of care for patients under 1 year of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude healthy newborn infants (codes V30–V39). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate of days of care per 1,000 live births						
Complications of pregnancy, childbirth and the puerperium 630–676	...	...	...	...	...	...
Induced abortion 635–636	...	...	...	...	...	...
Other pregnancy with abortive outcome 630–634, 637–639	...	...	...	...	...	...
Complications of labor, delivery and the puerperium 652–676	...	...	...	...	...	...
Diseases of the skin and subcutaneous tissue 680–709	66.9	23.7	68.3	*20.6	65.4	*27.0
Diseases of the musculoskeletal system and connective tissue 710–739	13.0	18.4	16.1	*	9.7	*21.8
Osteoarthritis and allied disorders 715	*	*	-	-	*	*
Other arthropathies and related disorders 710–714, 716–719	*	*	*	*	*	*
Intervertebral disc disorders 722	-	*	-	*	-	*
Other dorsopathies 720–721, 723–724	*	*	-	*	*	*
Rheumatism, excluding the back 725–729	-	*	-	*	-	*
Disorders of bone and cartilage 730–733	12.3	*	15.7	*	8.7	*
Congenital anomalies 740–759	277.6	235.2	275.2	235.0	280.1	235.4
Certain conditions originating in the perinatal period 760–779	378.4	1,974.6	367.7	1,873.2	389.7	2,081.5
Symptoms, signs and ill-defined conditions 780–799	33.5	53.0	31.7	54.5	35.5	51.3
Injury and poisoning 800–999	64.7	61.2	71.2	49.5	57.7	73.5
Fractures 800–829	12.6	*19.9	12.4	*	12.8	*31.7
Dislocations, sprains and strains 830–848	*	*	*	*	*	*
Intracranial injury, excluding those with skull fracture 850–854	5.1	*	5.4	*	4.8	*
Open wound and injury to blood vessels 870–904	1.9	*	*	*	*	*
Burns 940–949	28.8	*	35.2	*	22.1	*
Poisoning and toxic effects 960–989	6.1	*	5.5	*	6.7	*
Complications of surgical and medical care not elsewhere classified 996–999	*	*	*	*	*	*
Supplementary classification of factors influencing health status and contact with health services V01–V82	26.0	27.4	20.1	30.8	32.2	23.8

Table 6. Rates of discharge and days of care for patients 1–14 years of age, by sex and diagnosis: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Discharge rate per 1,000 population						
All conditions	60.5	59.6	67.4	65.4	53.2	53.4
Infectious and parasitic diseases 001–139	5.5	2.6	5.9	2.9	5.0	2.3
Intestinal infectious diseases 001–009	1.2	0.7	1.3	0.8	1.0	0.5
Tuberculosis 010–018	0.1	*	0.1	*	0.2	*
Viral hepatitis 070	1.8	*	1.9	*	1.8	*
Neoplasms 140–239	1.1	1.3	1.2	1.2	1.0	1.4
Malignant neoplasms 140–208	0.8	0.7	0.9	0.7	0.6	0.7
Malignant neoplasm of stomach 151	-	-	-	-	-	-
Malignant neoplasm of other digestive organs and peritoneum 150, 152–159	0.0	*	*	*	*	*
Malignant neoplasm of trachea, bronchus and lung 162	-	*	-	-	-	*
Malignant neoplasm of breast 174–175	-	-	-	-	-	-
Malignant neoplasm of cervix uteri 180	-	-	...	...	-	-
Malignant neoplasm of other female genital organs 179, 181–184	*	*	...	...	*	*
Malignant neoplasm of prostate 185	-	-	-	-	...	...
Leukemia 204–208	0.3	*	0.4	*	0.3	*
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior 210–239	0.3	0.6	0.3	0.5	0.3	0.6
Benign neoplasm of uterus 218–219	-	-	...	...	-	-
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	0.5	1.0	0.5	1.0	0.5	1.1
Diabetes mellitus 250	0.1	0.4	0.2	*0.3	0.1	0.5
Diseases of blood and blood-forming organs 280–289	0.6	1.4	0.8	1.5	0.5	1.2
Mental disorders 290–319	0.4	0.9	0.4	0.8	0.4	1.0
Diseases of the nervous system and sense organs 320–389	3.6	6.0	3.9	6.9	3.2	5.1
Disorders of the autonomic nervous system 337	*	*	*	*	*	-
Other disorders of the central nervous system 320–336, 340–349	1.5	1.0	1.8	1.2	1.3	0.8
Disorders of the peripheral nervous system 350–359	0.1	*0.2	0.1	*	0.1	*
Cataract 366	0.1	*	0.1	*	0.1	*
Other disorders of the eye and adnexa 360–365, 367–379	1.0	1.0	1.0	1.1	1.0	1.0
Diseases of the ear and mastoid process 380–389	0.9	3.8	1.0	4.4	0.7	3.2

Table 6. Rates of discharge and days of care for patients 1–14 years of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code		Both sexes		Male		Female	
		Poland	United States	Poland	United States	Poland	United States
Discharge rate per 1,000 population							
Diseases of the circulatory system	390-459	0.8	0.4	0.8	0.5	0.8	*0.3
Rheumatic heart disease	390-398	0.4	*	0.4	*	0.5	*
Essential hypertension	401	0.0	*	*	*	*	*
Hypertensive heart and renal disease	402-404	*	*	*	*	*	*
Acute myocardial infarction	410	-	*	-	-	-	*
Other acute and subacute forms of ischemic heart disease	411	-	*	-	-	-	*
Angina pectoris	413	-	*	-	*	-	-
Other chronic ischemic heart disease	412, 414	-	*	-	*	-	-
Diseases of pulmonary circulation	415-417	-	*	-	*	-	*
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders	420-426	0.1	*	0.1	*	0.1	*
Cardiac dysrhythmias	427	0.0	*	0.0	*	0.0	*
Heart failure	428	*	*	-	*	*	*
Ill-defined descriptions and complications of heart disease	429	0.0	*	*	*	*	*
Acute cerebrovascular disease	430-436	0.0	*	*	*	*	-
Atherosclerosis	440	-	-	-	-	-	-
Other diseases of arteries, arterioles and capillaries	441-448	0.0	*	0.0	*	0.0	*
Diseases of veins and lymphatics, and other diseases of the circulatory system	451-459	0.1	*	0.1	*	0.1	*
Diseases of the respiratory system	460-519	19.4	17.2	22.0	18.4	16.7	16.0
Acute respiratory infections	460-466	7.0	3.6	8.0	3.9	5.9	3.3
Chronic disease of tonsils and adenoids	474	2.9	6.3	3.1	5.7	2.6	6.8
Other diseases of upper respiratory tract	470-473, 475-478	1.1	0.4	1.2	0.6	1.0	*0.3
Pneumonia	480-486	5.1	3.3	5.6	3.8	4.6	2.8
Influenza	487	0.2	0.3	0.2	*0.3	0.1	*0.3
Bronchitis and emphysema	490-492	2.6	0.6	3.1	0.7	2.0	0.5
Asthma	493	0.5	2.4	0.5	2.9	0.4	1.8
Diseases of the digestive system	520-579	8.0	7.7	9.1	8.7	6.9	6.6
Diseases of oral cavity, salivary glands and jaw	520-529	0.2	0.7	0.3	0.8	0.2	0.7
Gastric and duodenal ulcer	531-532	0.1	*	0.1	*	0.1	*
Other diseases of esophagus, stomach and duodenum	530, 533-537	1.1	0.5	1.1	0.4	1.1	0.6
Appendicitis	540-543	3.2	1.6	3.3	1.7	3.1	1.4
Hernia of abdominal cavity	550-553	1.7	1.6	2.7	2.5	0.7	0.8
Noninfective enteritis and colitis	555-558	0.6	2.4	0.7	2.5	0.6	2.3
Other diseases of intestines and peritoneum	560-569	0.8	0.6	0.8	0.6	0.8	0.6
Chronic liver disease and cirrhosis	571	0.0	*	0.0	-	0.0	*
Disorders of gall bladder and biliary tract	574-576	0.1	*	0.0	*	0.1	*
Other diseases of digestive system	570, 572-573, 577-579	0.1	*0.1	0.1	*	0.1	*
Diseases of the genitourinary system	580-629	3.3	3.3	2.6	3.4	4.1	3.3
Diseases of urinary system	580-599	2.7	2.2	1.5	1.7	3.9	2.7
Diseases of male genital organs	600-608	0.6	0.8	1.1	1.6	...	...
Disorders of breast	610-611	*	*	-	*	*	*
Inflammatory disease of female pelvic organs	614-616	0.0	*	...	...	0.0	*
Disorders of menstruation and other abnormal bleeding from female genital tract	626	0.0	*	...	...	0.1	*
Complications of pregnancy, childbirth and the puerperium	630-676	0.0	0.4	...	...	0.0	0.8
Induced abortion	635-636	*	*	...	...	*	*
Other pregnancy with abortive outcome	630-634, 637-639	*	*	...	...	*	*
Complications of labor, delivery and the puerperium	652-676	*	0.2	...	...	*	0.3
Diseases of the skin and subcutaneous tissue	680-709	1.8	1.3	2.0	1.5	1.6	1.1
Diseases of the musculoskeletal system and connective tissue	710-739	1.3	1.4	1.4	1.4	1.3	1.5
Osteoarthritis and allied disorders	715	0.0	*	0.0	*	0.0	-
Other arthropathies and related disorders	710-714, 716-719	0.4	0.4	0.4	*0.3	0.3	0.5
Intervertebral disc disorders	722	-	*	-	*	-	-
Other dorsopathies	720-721, 723-724	0.1	*	0.1	*	0.0	*
Rheumatism, excluding the back	725-729	0.1	0.5	0.1	*0.4	0.1	0.5
Disorders of bone and cartilage	730-733	0.5	0.4	0.6	0.5	0.4	*0.3
Congenital anomalies	740-759	2.4	2.5	2.6	3.0	2.3	2.1
Certain conditions originating in the perinatal period	760-779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions	780-799	2.3	1.9	2.4	1.9	2.3	1.9
Injury and poisoning	800-999	9.0	9.4	11.4	11.4	6.4	7.2
Fractures	800-829	2.7	3.1	3.5	3.8	1.7	2.3
Dislocations, sprains and strains	830-848	0.2	0.4	0.2	*0.4	0.2	0.4
Intracranial injury, excluding those with skull fracture	850-854	0.7	1.5	0.9	1.9	0.5	1.0
Open wound and injury to blood vessels	870-904	1.0	0.9	1.5	1.2	0.6	0.6
Burns	940-949	1.5	0.4	1.7	0.6	1.2	*0.3
Poisoning and toxic effects	960-989	0.9	0.8	0.9	0.9	0.9	0.8
Complications of surgical and medical care not elsewhere classified	996-999	0.0	0.3	0.0	*0.4	0.0	*0.3
Supplementary classification of factors influencing health status and contact with health services	V01-V82	0.4	0.7	0.4	0.8	0.3	0.5

Table 6. Rates of discharge and days of care for patients 1–14 years of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate of days of care per 1,000 population						
All conditions	904.4	240.3	985.5	263.0	819.6	216.6
Infectious and parasitic diseases 001–139	105.5	10.1	108.1	11.4	102.8	8.7
Intestinal infectious diseases 001–009	11.8	2.5	13.3	3.1	10.2	1.9
Tuberculosis 010–018	17.3	*	12.2	*	22.6	*
Viral hepatitis 070	43.7	*	44.6	*	42.8	*
Neoplasms 140–239	20.6	7.8	23.5	9.0	17.5	6.5
Malignant neoplasms 140–208	16.5	5.1	19.8	5.7	13.1	4.5
Malignant neoplasm of stomach 151	-	-	-	-	-	-
Malignant neoplasm of other digestive organs and peritoneum 150, 152–159	0.3	*	*	*	*	*
Malignant neoplasm of trachea, bronchus and lung 162	-	*	-	-	-	*
Malignant neoplasm of breast 174–175	-	-	-	-	-	-
Malignant neoplasm of cervix uteri 180	-	-	...	...	-	-
Malignant neoplasm of other female genital organs 179, 181–184	*	-	...	...	*	*
Malignant neoplasm of prostate 185	-	-	-	-	...	...
Leukemia 204–208	7.6	*	9.1	*	6.0	*
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior 210–239	4.1	2.7	3.7	3.3	4.4	2.0
Benign neoplasm of uterus 218–219	-	-	...	...	-	-
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	9.5	6.3	10.1	5.6	8.8	7.0
Diabetes mellitus 250	2.2	2.5	2.6	*1.9	1.8	3.1
Diseases of blood and blood-forming organs 280–289	8.7	5.3	9.8	6.3	7.6	4.3
Mental disorders 290–319	8.5	12.8	9.0	10.3	7.9	15.4
Diseases of the nervous system and sense organs 320–389	76.2	17.9	80.4	20.4	71.7	15.3
Disorders of the autonomic nervous system 337	*	*	*	*	*	-
Other disorders of the central nervous system 320–336, 340–349	38.6	6.6	41.3	6.6	35.8	6.5
Disorders of the peripheral nervous system 350–359	3.9	*0.7	3.0	*	4.8	*
Cataract 366	1.1	*	1.2	*	1.1	*
Other disorders of the eye and adnexa 360–365, 367–379	19.5	2.3	19.8	2.6	19.2	2.0
Diseases of the ear and mastoid process 380–389	12.9	8.1	15.1	10.0	10.6	6.2
Diseases of the circulatory system 390–459	18.4	3.3	18.1	3.8	18.8	*2.7
Rheumatic heart disease 390–398	11.5	*	10.8	*	12.3	*
Essential hypertension 401	0.3	*	*	*	*	*
Hypertensive heart and renal disease 402–404	*	*	*	*	*	*
Acute myocardial infarction 410	-	*	-	-	-	*
Other acute and subacute forms of ischemic heart disease 411	-	*	-	-	-	*
Angina pectoris 413	-	*	-	*	-	-
Other chronic ischemic heart disease 412, 414	-	*	-	*	-	-
Diseases of pulmonary circulation 415–417	-	*	-	*	-	*
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders 420–426	3.2	*	3.5	*	3.0	*
Cardiac dysrhythmias 427	0.5	*	0.4	*	0.5	*
Heart failure 428	*	*	*	*	*	*
Ill-defined descriptions and complications of heart disease 429	0.3	*	*	*	*	*
Acute cerebrovascular disease 430–436	0.5	*	*	*	*	-
Atherosclerosis 440	-	-	-	-	-	-
Other diseases of arteries, arterioles and capillaries 441–448	0.6	*	0.5	*	0.6	*
Diseases of veins and lymphatics, and other diseases of the circulatory system 451–459	0.8	*	1.0	*	0.5	*
Diseases of the respiratory system 460–519	292.2	54.8	345.0	61.6	237.0	47.7
Acute respiratory infections 460–466	62.0	11.8	70.7	13.3	53.0	10.3
Chronic disease of tonsils and adenoids 474	24.4	10.9	26.2	9.8	22.6	12.0
Other diseases of upper respiratory tract 470–473, 475–478	22.8	1.4	27.5	1.8	17.9	*0.9
Pneumonia 480–486	78.2	15.3	87.5	17.4	68.5	13.2
Influenza 487	1.2	0.9	1.6	*0.8	0.9	*1.0
Bronchitis and emphysema 490–492	77.9	2.1	98.3	2.6	56.5	1.6
Asthma 493	17.0	8.9	22.7	11.1	11.0	6.5
Diseases of the digestive system 520–579	76.1	27.0	86.3	29.1	65.4	24.7
Diseases of oral cavity, salivary glands and jaw 520–529	2.6	1.5	2.7	1.4	2.4	1.6
Gastric and duodenal ulcer 531–532	1.9	*	1.8	*	2.0	*
Other diseases of esophagus, stomach and duodenum 530, 533–537	8.9	2.1	8.8	1.7	9.0	2.4
Appendicitis 540–543	32.0	8.2	33.6	9.4	30.3	6.9
Hernia of abdominal cavity 550–553	14.8	3.3	23.1	4.9	6.2	1.7
Noninfective enteritis and colitis 555–558	4.8	8.2	5.2	8.3	4.5	8.1
Other diseases of intestines and peritoneum 560–569	6.7	2.4	6.9	2.6	6.5	2.3
Chronic liver disease and cirrhosis 571	0.5	*	0.7	-	0.4	*
Disorders of gall bladder and biliary tract 574–576	1.2	*	0.6	*	1.7	*
Other diseases of digestive system 570, 572–573, 577–579	2.6	*0.8	2.8	*	2.4	*

Table 6. Rates of discharge and days of care for patients 1–14 years of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code		Both sexes		Male		Female	
		Poland	United States	Poland	United States	Poland	United States
Rate of days of care per 1,000 population							
Diseases of the genitourinary system	580-629	51.4	11.8	36.2	11.6	67.2	12.1
Diseases of urinary system	580-599	46.0	8.9	27.3	8.1	65.5	9.8
Diseases of male genital organs	600-608	4.6	1.7	8.9	3.4	...	...
Disorders of breast	610-611	*	*	-	*	*	*
Inflammatory disease of female pelvic organs	614-616	0.2	*	...	...	0.4	*
Disorders of menstruation and other abnormal bleeding from female genital tract	626	0.3	*	...	...	0.6	*
Complications of pregnancy, childbirth and the puerperium	630-676	0.1	3.0	...	...	0.2	6.2
Induced abortion	635-636	*	*	...	...	*	*
Other pregnancy with abortive outcome	630-634, 637-639	*	*	...	...	*	*
Complications of labor, delivery and the puerperium	652-676	*	*0.7	...	...	*	*1.5
Diseases of the skin and subcutaneous tissue	680-709	22.1	5.7	23.0	6.9	21.1	4.5
Diseases of the musculoskeletal system and connective tissue	710-739	37.0	9.8	38.5	9.8	35.5	9.8
Osteoarthritis and allied disorders	715	0.5	*	0.7	*	*	-
Other arthropathies and related disorders	710-714, 716-719	9.1	2.8	8.6	*2.3	9.7	3.3
Intervertebral disc disorders	722	-	*	-	*	-	-
Other dorsopathies	720-721, 723-724	1.9	*	2.8	*	0.9	*
Rheumatism, excluding the back	725-729	1.7	1.5	2.1	*1.4	1.2	1.5
Disorders of bone and cartilage	730-733	12.8	4.0	16.1	5.0	9.3	*3.0
Congenital anomalies	740-759	56.1	12.4	48.0	13.3	64.7	11.3
Certain conditions originating in the perinatal period	760-779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions	780-799	19.5	6.1	20.9	6.1	18.1	6.1
Injury and poisoning	800-999	95.8	44.1	121.2	55.0	69.1	32.6
Fractures	800-829	30.8	17.5	40.4	23.7	20.8	11.0
Dislocations, sprains and strains	830-848	1.7	1.7	1.6	*1.6	1.8	1.7
Intracranial injury, excluding those with skull fracture	850-854	6.2	5.4	8.5	7.3	3.8	3.4
Open wound and injury to blood vessels	870-904	11.3	3.0	16.3	4.2	6.0	1.7
Burns	940-949	24.5	5.2	28.9	6.0	20.0	*4.4
Poisoning and toxic effects	960-989	4.2	3.1	4.1	3.3	4.4	2.8
Complications of surgical and medical care not elsewhere classified	996-999	0.6	1.9	0.5	*2.3	0.8	*1.4
Supplementary classification of factors influencing health status and contact with health services	V01-V82	6.7	2.0	7.3	2.5	6.1	1.4

Table 7. Rates of discharge and days of care for patients 15–44 years of age, by sex and diagnosis: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
	Discharge rate per 1,000 population					
All conditions	90.1	134.0	67.8	91.5	112.9	175.1
Infectious and parasitic diseases	001-139	3.7	2.4	4.0	3.3	2.5
Intestinal infectious diseases	001-009	0.3	0.4	0.3	0.4	0.5
Tuberculosis	010-018	1.0	0.1	1.3	*0.1	*
Viral hepatitis	070	1.4	0.2	1.3	*0.2	*0.2
Neoplasms	140-239	3.1	4.5	1.9	2.1	6.9
Malignant neoplasms	140-208	1.6	1.7	1.5	1.4	2.1
Malignant neoplasm of stomach	151	0.1	*	0.1	*	*
Malignant neoplasm of other digestive organs and peritoneum	150, 152-159	0.1	0.1	0.2	*0.1	*0.1
Malignant neoplasm of trachea, bronchus and lung	162	0.1	0.1	0.1	*0.1	*
Malignant neoplasm of breast	174-175	0.2	0.3	-	-	0.5
Malignant neoplasm of cervix uteri	180	0.2	0.2	...	...	0.3
Malignant neoplasm of other female genital organs	179, 181-184	0.1	*0.1	...	...	*0.2
Malignant neoplasm of prostate	185	-	*	-	*	...
Leukemia	204-208	0.1	*0.1	0.1	*	*0.1
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior	210-239	1.5	2.8	0.4	0.7	4.8
Benign neoplasm of uterus	218-219	0.5	1.0	...	...	1.9
Endocrine, nutritional and metabolic diseases and immunity disorders	240-279	1.2	2.9	0.8	2.0	3.7
Diabetes mellitus	250	0.5	1.3	0.5	1.2	1.4
Diseases of blood and blood-forming organs	280-289	0.4	0.9	0.3	0.8	1.0

Table 7. Rates of discharge and days of care for patients 15–44 years of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Discharge rate per 1,000 population						
Mental disorders 290–319	1.4	9.2	1.3	10.0	1.5	8.3
Diseases of the nervous system and sense organs 320–389	3.7	3.7	4.2	3.4	3.2	4.0
Disorders of the autonomic nervous system 337	0.0	*	0.0	*	0.0	*
Other disorders of the central nervous system 320–336, 340–349	1.1	1.4	1.3	1.2	1.0	1.5
Disorders of the peripheral nervous system 350–359	0.9	0.8	1.1	0.6	0.7	0.9
Cataract 366	0.1	0.1	0.1	0.2	0.0	*
Other disorders of the eye and adnexa 360–365, 367–379	0.9	0.6	1.0	0.6	0.8	0.6
Diseases of the ear and mastoid process 380–389	0.8	0.8	0.9	0.7	0.6	0.9
Diseases of the circulatory system 390–459	4.2	5.2	5.0	5.6	3.4	4.8
Rheumatic heart disease 390–398	0.7	0.2	0.7	*0.1	0.8	0.2
Essential hypertension 401	0.6	0.6	0.7	0.5	0.5	0.7
Hypertensive heart and renal disease 402–404	0.1	0.1	0.1	*0.1	0.1	*0.1
Acute myocardial infarction 410	0.2	0.2	0.4	0.4	0.1	*
Other acute and subacute forms of ischemic heart disease 411	0.2	*0.1	0.2	*0.1	0.1	*
Angina pectoris 413	0.1	0.2	0.2	0.3	0.1	*0.1
Other chronic ischemic heart disease 412, 414	0.3	0.5	0.4	0.8	0.2	*0.2
Diseases of pulmonary circulation 415–417	0.1	0.1	0.1	*	0.0	*0.2
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders 420–426	0.3	0.4	0.3	0.5	0.2	0.4
Cardiac dysrhythmias 427	0.3	0.4	0.3	0.4	0.2	0.4
Heart failure 428	0.1	*0.1	0.1	*	0.1	*
Ill-defined descriptions and complications of heart disease 429	0.1	*0.1	0.1	*	0.1	*
Acute cerebrovascular disease 430–436	0.2	0.2	0.3	0.2	0.2	0.2
Atherosclerosis 440	0.1	*	0.2	*	0.1	*
Other diseases of arteries, arterioles and capillaries 441–448	0.2	0.1	0.2	*0.1	0.1	*0.1
Diseases of veins and lymphatics, and other diseases of the circulatory system 451–459	0.7	1.7	0.7	1.6	0.7	1.9
Diseases of the respiratory system 460–519	5.6	7.3	6.3	6.3	4.9	8.2
Acute respiratory infections 460–466	0.9	1.0	0.9	0.7	0.9	1.2
Chronic disease of tonsils and adenoids 474	0.6	1.4	0.5	0.9	0.8	1.9
Other diseases of upper respiratory tract 470–473, 475–478	1.6	1.6	2.0	1.7	1.2	1.6
Pneumonia 480–486	1.0	1.1	1.3	1.1	0.7	1.0
Influenza 487	0.1	0.2	0.1	*0.2	0.1	0.2
Bronchitis and emphysema 490–492	0.7	0.3	0.7	0.3	0.6	0.4
Asthma 493	0.4	1.0	0.3	0.6	0.4	1.3
Diseases of the digestive system 520–579	11.6	15.0	11.6	13.8	11.5	16.2
Diseases of oral cavity, salivary glands and jaw 520–529	0.3	1.6	0.3	1.3	0.3	1.9
Gastric and duodenal ulcer 531–532	2.1	0.7	3.1	0.8	1.1	0.5
Other diseases of esophagus, stomach and duodenum 530, 533–537	1.4	2.3	1.6	2.2	1.2	2.4
Appendicitis 540–543	3.2	1.5	2.8	1.6	3.5	1.3
Hernia of abdominal cavity 550–553	0.7	2.0	1.1	3.1	0.3	1.0
Noninfective enteritis and colitis 555–558	0.5	1.9	0.5	1.6	0.4	2.3
Other diseases of intestines and peritoneum 560–569	0.7	1.9	0.7	1.4	0.7	2.4
Chronic liver disease and cirrhosis 571	0.2	0.3	0.3	0.3	0.1	0.2
Disorders of gall bladder and biliary tract 574–576	2.1	2.0	0.8	0.7	3.4	3.3
Other diseases of digestive system 570, 572–573, 577–579	0.5	0.8	0.5	1.0	0.4	0.7
Diseases of the genitourinary system 580–629	11.5	17.4	4.4	5.5	18.8	28.9
Diseases of urinary system 580–599	4.0	4.1	3.8	3.5	4.2	4.7
Diseases of male genital organs 600–608	0.3	0.9	0.6	1.8	...	...
Disorders of breast 610–611	0.1	1.1	*	*0.2	0.2	2.1
Inflammatory disease of female pelvic organs 614–616	1.8	2.6	...	...	3.6	5.1
Disorders of menstruation and other abnormal bleeding from female genital tract 626	2.1	3.3	...	...	4.2	6.6
Complications of pregnancy, childbirth and the puerperium 630–676	23.0	27.8	...	...	46.5	54.7
Induced abortion 635–636	3.7	1.6	...	...	7.6	3.1
Other pregnancy with abortive outcome 630–634, 637–639	5.0	3.5	...	...	10.2	6.9
Complications of labor, delivery and the puerperium 652–676	4.5	15.1	...	...	9.1	29.8
Diseases of the skin and subcutaneous tissue 680–709	2.5	2.3	3.0	2.6	1.9	2.0
Diseases of the musculoskeletal system and connective tissue 710–739	2.6	8.8	3.0	9.3	2.3	8.3
Osteoarthritis and allied disorders 715	0.2	0.1	0.1	*0.2	0.2	*0.1
Other arthropathies and related disorders 710–714, 716–719	0.6	1.6	0.6	1.9	0.7	1.4
Intervertebral disc disorders 722	0.6	1.9	0.7	2.3	0.4	1.5
Other dorsopathies 720–721, 723–724	0.5	1.6	0.6	1.6	0.3	1.6
Rheumatism, excluding the back 725–729	0.3	1.7	0.4	1.5	0.3	2.0
Disorders of bone and cartilage 730–733	0.3	0.9	0.4	1.2	0.2	0.6
Congenital anomalies 740–759	0.3	0.9	0.3	0.8	0.3	1.1
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	1.3	2.7	1.2	2.2	1.3	3.1

Table 7. Rates of discharge and days of care for patients 15–44 years of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

<i>Diagnosis and ICD-9 code</i>			<i>Both sexes</i>		<i>Male</i>		<i>Female</i>	
			<i>Poland</i>	<i>United States</i>	<i>Poland</i>	<i>United States</i>	<i>Poland</i>	<i>United States</i>
Discharge rate per 1,000 population								
Injury and poisoning	800–999	12.9	17.1	20.0	23.0	5.8	11.4	
Fractures	800–829	4.7	4.2	7.8	6.3	1.6	2.3	
Dislocations, sprains and strains	830–848	0.8	4.1	1.3	5.5	0.3	2.8	
Intracranial injury, excluding those with skull fracture	850–854	0.9	1.5	1.4	1.9	0.5	1.1	
Open wound and injury to blood vessels	870–904	1.7	2.1	2.9	3.4	0.5	0.8	
Burns	940–949	0.5	0.4	0.8	0.6	0.3	*0.2	
Poisoning and toxic effects	960–989	1.2	1.1	1.2	1.1	1.3	1.2	
Complications of surgical and medical care not elsewhere classified	996–999	0.1	0.9	0.1	0.6	0.1	1.1	
Supplementary classification of factors influencing health status and contact with health services	V01–V82	1.2	5.9	0.5	1.7	1.8	9.9	
Rate of days of care per 1,000 population								
All conditions		1,159.6	739.8	1,086.6	581.0	1,234.4	893.4	
Infectious and parasitic diseases	001–139	145.4	14.9	175.6	14.1	114.4	15.8	
Intestinal infectious diseases	001–009	2.8	1.7	2.7	1.4	2.8	2.0	
Tuberculosis	010–018	82.1	2.0	109.4	*2.4	54.2	*	
Viral hepatitis . . . . .	. . . 070	42.5	1.2	41.9	*1.2	43.1	*1.3	
Neoplasms	140–239	56.4	31.8	38.8	18.2	74.3	45.0	
Malignant neoplasms	140–208	34.5	16.8	32.1	14.4	37.0	19.1	
Malignant neoplasm of stomach . . . . .	. . . 151	0.9	*	1.0	*	0.7	*	
Malignant neoplasm of other digestive organs and peritoneum . . . . .	. . . 150, 152–159	2.7	1.3	3.7	*1.2	1.8	*1.4	
Malignant neoplasm of trachea, bronchus and lung . . . . .	. . . 162	2.5	1.6	4.0	*1.7	0.8	*	
Malignant neoplasm of breast . . . . .	. . . 174–175	3.5	2.1	-	-	6.9	4.1	
Malignant neoplasm of cervix uteri . . . . .	. . . 180	4.4	1.4	...	...	9.0	2.7	
Malignant neoplasm of other female genital organs . . . . .	. . . 179, 181–184	2.4	*0.5	...	...	4.8	*1.1	
Malignant neoplasm of prostate . . . . .	. . . 185	-	*	-	*	...	...
Leukemia	204–208	2.4	*1.5	2.8	*	1.9	*1.1	
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior	210–239	21.8	15.0	6.7	3.8	37.3	25.9	
Benign neoplasm of uterus	218–219	7.8	6.8	...	...	15.8	13.4	
Endocrine, nutritional and metabolic diseases and immunity disorders	240–279	19.9	20.9	13.5	14.7	26.4	26.9	
Diabetes mellitus . . . . .	. . . 250	7.6	10.3	8.7	9.7	6.5	11.0	
Diseases of blood and blood-forming organs	280–289	5.2	5.1	3.5	3.8	6.9	6.3	
Mental disorders	290–319	15.0	101.3	13.0	106.5	17.0	96.2	
Diseases of the nervous system and sense organs	320–389	67.6	21.8	76.3	19.9	58.7	23.6	
Disorders of the autonomic nervous system . . . . .	. . . 337	0.3	*	0.2	*	0.3	*	
Other disorders of the central nervous system	320–336, 340–349	23.7	13.1	24.7	12.5	22.7	13.6	
Disorders of the peripheral nervous system	350–359	16.2	3.5	19.6	2.5	12.7	4.4	
Cataract . . . . .	. . . 366	1.1	0.4	1.4	0.6	0.8	*	
Other disorders of the eye and adnexa	360–365, 367–379	14.2	2.2	16.4	2.1	12.0	2.4	
Diseases of the ear and mastoid process	380–389	12.2	2.6	14.0	2.2	10.2	3.0	
Diseases of the circulatory system	390–459	69.0	36.9	82.2	41.1	55.4	32.8	
Rheumatic heart disease	390–398	13.5	1.6	12.2	*1.2	14.9	1.9	
Essential hypertension . . . . .	. . . 401	7.2	3.3	8.5	2.9	6.0	3.7	
Hypertensive heart and renal disease	402–404	1.9	0.8	2.3	*0.7	1.5	*0.8	
Acute myocardial infarction . . . . .	. . . 410	5.1	2.7	9.0	4.7	1.2	*	
Other acute and subacute forms of ischemic heart disease . . . . .	. . . 411	2.1	*0.6	3.2	*0.9	1.1	*	
Angina pectoris . . . . .	. . . 413	1.5	0.8	2.0	1.2	1.0	*0.5	
Other chronic ischemic heart disease	412, 414	3.9	3.5	5.7	5.8	2.2	*1.4	
Diseases of pulmonary circulation	415–417	1.2	1.4	1.3	*	1.1	*1.8	
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders	420–426	5.2	3.1	5.7	3.5	4.7	2.7	
Cardiac dysrhythmias . . . . .	. . . 427	2.9	2.0	3.6	2.0	2.2	2.0	
Heart failure . . . . .	. . . 428	1.1	*0.6	1.2	*	0.9	*	
Ill-defined descriptions and complications of heart disease . . . . .	. . . 429	1.2	*0.5	1.1	*	1.3	*	
Acute cerebrovascular disease	430–436	4.3	2.9	5.4	3.9	3.1	1.9	
Atherosclerosis . . . . .	. . . 440	2.5	*	4.0	*	0.9	*	
Other diseases of arteries, arterioles and capillaries	441–448	4.1	1.1	5.8	*0.9	2.3	*1.2	
Diseases of veins and lymphatics, and other diseases of the circulatory system	451–459	10.2	10.8	10.1	9.4	10.4	12.1	
Diseases of the respiratory system	460–519	90.5	31.9	104.8	28.1	75.9	35.5	
Acute respiratory infections	460–466	8.5	4.0	8.6	2.8	8.3	5.2	
Chronic disease of tonsils and adenoids . . . . .	. . . 474	6.3	3.2	4.9	2.1	7.7	4.3	
Other diseases of upper respiratory tract	470–473, 475–478	18.5	5.4	21.8	5.1	15.1	5.7	
Pneumonia	480–486	18.8	6.8	26.1	7.5	11.3	6.2	
Influenza . . . . .	. . . 487	0.5	0.9	0.4	*0.8	0.6	1.0	
Bronchitis and emphysema	490–492	14.6	1.6	14.4	1.3	14.9	2.0	
Asthma . . . . .	. . . 493	9.4	5.2	9.0	3.1	9.8	7.1	

Table 7. Rates of discharge and days of care for patients 15–44 years of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Rate of days of care per 1,000 population						
Diseases of the digestive system 520–579	148.2	82.0	150.8	71.2	145.6	92.4
Diseases of oral cavity, salivary glands and jaw 520–529	3.5	3.8	3.6	3.0	3.3	4.5
Gastric and duodenal ulcer 531–532	34.4	4.5	49.9	5.0	18.5	4.0
Other diseases of esophagus, stomach and duodenum 530, 533–537	13.9	11.2	15.3	10.3	12.4	12.1
Appendicitis 540–543	31.6	7.3	29.5	8.2	33.8	6.5
Hernia of abdominal cavity 550–553	9.3	9.3	14.0	12.6	4.4	6.1
Noninfective enteritis and colitis 555–558	5.0	9.7	5.0	7.8	4.9	11.6
Other diseases of intestines and peritoneum 560–569	8.5	12.0	8.9	8.1	8.0	15.8
Chronic liver disease and cirrhosis 571	3.5	2.5	4.9	2.7	2.1	2.2
Disorders of gall bladder and biliary tract 574–576	30.4	15.2	11.0	5.5	50.2	24.5
Other diseases of digestive system 570, 572–573, 577–579	8.3	6.5	8.7	7.9	7.9	5.1
Diseases of the genitourinary system 580–629	93.0	78.0	39.1	23.1	148.1	131.1
Diseases of urinary system 580–599	37.6	19.9	31.9	15.8	43.4	23.8
Diseases of male genital organs 600–608	3.5	3.3	7.0	6.8	...	...
Disorders of breast 610–611	1.0	3.5	*	*0.4	1.8	6.4
Inflammatory disease of female pelvic organs 614–616	18.9	13.1	...	...	38.2	25.7
Disorders of menstruation and other abnormal bleeding from female genital tract 626	9.7	11.0	...	...	19.7	21.6
Complications of pregnancy, childbirth and the puerperium 630–676	164.0	105.1	...	...	331.9	206.7
Induced abortion 635–636	6.9	2.3	...	...	13.9	4.6
Other pregnancy with abortive outcome 630–634, 637–639	24.0	8.4	...	...	48.6	16.6
Complications of labor, delivery and the puerperium 652–676	44.1	63.1	...	...	89.3	124.2
Diseases of the skin and subcutaneous tissue 680–709	38.9	13.0	47.8	15.3	29.9	10.7
Diseases of the musculoskeletal system and connective tissue 710–739	60.4	58.0	63.6	59.6	57.1	56.5
Osteoarthritis and allied disorders 715	4.2	0.7	2.8	*0.8	5.6	*0.6
Other arthropathies and related disorders 710–714, 716–719	15.1	9.2	11.7	9.1	18.6	9.3
Intervertebral disc disorders 722	13.0	17.5	14.9	20.7	11.1	14.4
Other dorsopathies 720–721, 723–724	10.7	12.4	14.1	11.8	7.2	13.0
Rheumatism, excluding the back 725–729	4.3	7.2	5.0	5.6	3.6	8.8
Disorders of bone and cartilage 730–733	8.1	6.7	11.9	8.8	4.1	4.6
Congenital anomalies 740–759	8.1	6.3	6.3	5.6	9.9	7.0
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	10.1	10.5	10.1	9.5	10.1	11.4
Injury and poisoning 800–999	160.0	105.1	256.5	143.5	61.1	68.0
Fractures 800–829	76.9	34.7	127.1	50.1	25.6	19.9
Dislocations, sprains and strains 830–848	10.4	23.0	17.1	28.6	3.5	17.7
Intracranial injury, excluding those with skull fracture 850–854	11.5	8.6	17.6	11.4	5.3	5.9
Open wound and injury to blood vessels 870–904	19.9	10.9	33.8	17.9	5.8	4.2
Burns 940–949	8.9	4.4	13.5	7.0	4.2	*1.8
Poisoning and toxic effects 960–989	5.4	3.9	5.4	4.0	5.5	3.9
Complications of surgical and medical care not elsewhere classified 996–999	1.3	5.1	1.1	4.3	1.5	5.9
Supplementary classification of factors influencing health status and contact with health services V01–V82	8.1	17.2	4.7	6.5	11.7	27.5

Table 8. Rates of discharge and days of care for patients 45–64 years of age, by sex and diagnosis: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Discharge rate per 1,000 population						
All conditions 126.1	126.1	194.8	138.8	195.4	114.9	194.2
Infectious and parasitic diseases 001–139	4.8	2.0	6.5	2.0	3.3	2.0
Intestinal infectious diseases 001–009	0.2	0.4	0.3	*0.3	0.2	0.5
Tuberculosis 010–018	2.2	*0.2	3.7	*0.3	0.8	*
Viral hepatitis 070	1.3	*	1.4	*	1.3	*
Neoplasms 140–239	13.5	20.2	12.3	16.7	14.6	23.3
Malignant neoplasms 140–208	10.0	15.5	10.9	14.4	9.3	16.6
Malignant neoplasm of stomach 151	0.7	*0.2	1.1	*0.3	0.4	*
Malignant neoplasm of other digestive organs and peritoneum 150, 152–159	1.2	2.3	1.4	2.6	1.1	2.1
Malignant neoplasm of trachea, bronchus and lung 162	1.8	2.7	3.4	3.7	0.4	1.8
Malignant neoplasm of breast 174–175	1.2	2.2	*	*	2.3	4.2

Table 8. Rates of discharge and days of care for patients 45–64 years of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Discharge rate per 1,000 population						
Malignant neoplasm of cervix uteri 180	0.9	0.4	...	...	1.6	0.8
Malignant neoplasm of other female genital organs 179, 181–184	0.9	1.3	...	...	1.6	2.6
Malignant neoplasm of prostate 185	0.1	0.6	0.2	1.2	...	...
Leukemia 204–208	0.3	0.3	0.4	*0.3	0.3	*
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior 210–239	3.5	4.6	1.4	2.4	5.3	6.7
Benign neoplasm of uterus 218–219	1.9	1.5	...	...	3.5	2.8
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	3.4	8.3	2.7	6.3	3.9	10.1
Diabetes mellitus 250	2.1	5.5	2.1	4.6	2.1	6.3
Diseases of blood and blood-forming organs 280–289	0.6	1.3	0.4	1.0	0.7	1.5
Mental disorders 290–319	1.4	10.1	1.2	11.7	1.5	8.7
Diseases of the nervous system and sense organs 320–389	6.3	9.2	7.0	8.2	5.7	10.1
Disorders of the autonomic nervous system 337	*	*	*	*	*	*
Other disorders of the central nervous system 320–336, 340–349	1.4	2.0	1.8	1.9	1.2	2.1
Disorders of the peripheral nervous system 350–359	1.6	1.9	1.9	1.3	1.4	2.4
Cataract 366	0.4	2.2	0.4	2.3	0.4	2.1
Other disorders of the eye and adnexa 360–365, 367–379	1.9	1.7	1.9	1.5	1.9	1.9
Diseases of the ear and mastoid process 380–389	0.9	1.4	1.0	1.1	0.8	1.6
Diseases of the circulatory system 390–459	27.2	38.5	34.3	48.3	20.9	29.6
Rheumatic heart disease 390–398	1.7	0.5	1.4	*0.3	2.1	0.8
Essential hypertension 401	3.3	3.0	2.8	2.7	3.7	3.1
Hypertensive heart and renal disease 402–404	1.5	1.2	1.4	1.3	1.7	1.1
Acute myocardial infarction 410	2.7	3.8	4.6	6.1	1.0	1.8
Other acute and subacute forms of ischemic heart disease 411	1.5	1.5	2.2	1.8	1.0	1.3
Angina pectoris 413	1.2	2.4	1.7	2.8	0.8	2.1
Other chronic ischemic heart disease 412, 414	3.5	9.2	5.0	14.0	2.1	4.9
Diseases of pulmonary circulation 415–417	1.2	0.6	2.1	0.6	0.4	0.5
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders 420–426	1.2	1.3	1.3	1.4	1.1	1.2
Cardiac dysrhythmias 427	0.9	2.7	1.0	3.0	0.8	2.4
Heart failure 428	1.0	1.5	1.2	1.7	0.8	1.3
Ill-defined descriptions and complications of heart disease 429	0.3	0.8	0.4	1.0	0.3	0.6
Acute cerebrovascular disease 430–436	2.0	3.3	2.5	3.9	1.5	2.7
Atherosclerosis 440	2.2	0.6	3.4	0.9	1.1	*0.4
Other diseases of arteries, arterioles and capillaries 441–448	0.6	1.5	0.9	2.0	0.3	1.0
Diseases of veins and lymphatics, and other diseases of the circulatory system 451–459	1.9	3.8	1.9	4.0	2.0	3.7
Diseases of the respiratory system 460–519	11.0	15.0	14.8	16.3	7.6	13.9
Acute respiratory infections 460–466	0.7	1.5	0.6	1.3	0.7	1.6
Chronic disease of tonsils and adenoids 474	0.1	*0.1	0.1	*	0.1	*
Other diseases of upper respiratory tract 470–473, 475–478	1.7	1.5	2.3	1.7	1.2	1.3
Pneumonia 480–486	2.5	3.2	3.6	3.2	1.5	3.1
Influenza 487	0.0	0.5	0.1	*0.4	0.0	0.7
Bronchitis and emphysema 490–492	3.8	2.2	5.3	2.7	2.5	1.8
Asthma 493	1.2	2.3	1.3	1.9	1.1	2.6
Diseases of the digestive system 520–579	19.3	29.4	21.2	30.4	17.7	28.5
Diseases of oral cavity, salivary glands and jaw 520–529	0.2	1.1	0.3	1.1	0.2	1.1
Gastric and duodenal ulcer 531–532	3.7	2.1	5.8	2.4	1.9	1.8
Other diseases of esophagus, stomach and duodenum 530, 533–537	1.9	4.2	2.2	4.0	1.6	4.4
Appendicitis 540–543	1.5	0.6	1.6	0.6	1.5	0.5
Hernia of abdominal cavity 550–553	2.5	6.1	3.9	9.1	1.2	3.4
Noninfective enteritis and colitis 555–558	0.7	2.1	0.7	1.4	0.7	2.7
Other diseases of intestines and peritoneum 560–569	1.1	4.9	1.2	4.1	1.0	5.5
Chronic liver disease and cirrhosis 571	0.9	1.4	1.4	1.6	0.5	1.1
Disorders of gall bladder and biliary tract 574–576	5.5	4.6	2.9	3.3	7.8	5.9
Other diseases of digestive system 570, 572–573, 577–579	1.2	2.4	1.2	2.8	1.3	2.0
Diseases of the genitourinary system 580–629	13.8	20.7	7.7	15.6	19.2	25.3
Diseases of urinary system 580–599	5.5	7.5	5.8	8.7	5.3	6.5
Diseases of male genital organs 600–608	0.9	3.1	1.9	6.6	...	...
Disorders of breast 610–611	0.1	1.6	*	*0.2	0.2	2.9
Inflammatory disease of female pelvic organs 614–616	0.5	0.6	...	...	0.9	1.2
Disorders of menstruation and other abnormal bleeding from female genital tract 626	2.7	2.1	...	...	5.0	4.1
Complications of pregnancy, childbirth and the puerperium 630–676	0.3	*0.1	...	...	0.5	*0.3
Induced abortion 635–636	0.0	*	...	...	0.1	*
Other pregnancy with abortive outcome 630–634, 637–639	0.1	*	...	...	0.2	*
Complications of labor, delivery and the puerperium 652–676	0.0	*	...	...	0.1	*
Diseases of the skin and subcutaneous tissue 680–709	2.8	3.4	3.2	3.1	2.5	3.7

Table 8. Rates of discharge and days of care for patients 45–64 years of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Discharge rate per 1,000 population						
Diseases of the musculoskeletal system and connective tissue 710–739	7.4	16.4	7.4	14.4	7.5	18.1
Osteoarthritis and allied disorders 715	1.5	1.3	1.1	1.0	1.9	1.6
Other arthropathies and related disorders 710–714, 716–719	1.7	2.2	1.2	1.5	2.2	2.9
Intervertebral disc disorders 722	1.2	3.3	1.4	3.7	1.0	2.9
Other dorsopathies 720–721, 723–724	2.0	3.6	2.2	3.6	1.7	3.6
Rheumatism, excluding the back 725–729	0.6	3.4	0.8	3.0	0.4	3.8
Disorders of bone and cartilage 730–733	0.3	1.3	0.5	1.1	0.1	1.6
Congenital anomalies 740–759	0.2	0.9	0.2	0.7	0.2	1.0
Certain conditions originating in the perinatal period 760–779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions 780–799	1.3	3.3	1.4	3.3	1.2	3.2
Injury and poisoning 800–999	12.4	14.1	18.1	15.7	7.5	12.7
Fractures 800–829	6.0	4.3	8.5	4.0	3.8	4.6
Dislocations, sprains and strains 830–848	0.7	3.3	1.0	3.6	0.4	2.9
Intracranial injury, excluding those with skull fracture 850–854	0.9	0.7	1.3	0.9	0.5	0.6
Open wound and injury to blood vessels 870–904	1.2	1.0	2.0	1.7	0.6	*0.4
Burns 940–949	0.4	0.3	0.5	*0.5	0.2	*
Poisoning and toxic effects 960–989	0.7	0.6	0.9	*0.4	0.5	0.7
Complications of surgical and medical care not elsewhere classified 996–999	0.1	1.5	0.1	1.8	0.1	1.3
Supplementary classification of factors influencing health status and contact with health services V01–V82	0.4	1.9	0.5	1.7	0.3	2.1
Rate of days of care per 1,000 population						
All conditions	2,440.9	1,597.4	2,884.6	1,590.3	2,052.8	1,603.8
Infectious and parasitic diseases 001–139	237.2	17.1	370.3	17.2	120.9	17.0
Intestinal infectious diseases 001–009	2.9	2.0	3.2	*1.1	2.6	2.8
Tuberculosis 010–018	158.4	*2.4	281.3	*4.5	50.8	*
Viral hepatitis 070	48.5	*	50.6	*	46.6	*
Neoplasms 140–239	318.4	208.8	324.5	179.2	313.2	235.6
Malignant neoplasms 140–208	259.1	179.6	295.4	167.2	227.5	190.8
Malignant neoplasm of stomach 151	15.0	*3.0	21.3	*3.8	9.5	*
Malignant neoplasm of other digestive organs and peritoneum 150, 152–159	32.9	35.6	33.6	37.7	32.3	33.7
Malignant neoplasm of trachea, bronchus and lung 162	62.9	34.0	117.4	44.1	15.3	24.7
Malignant neoplasm of breast 174–175	26.3	22.4	*	*	48.9	42.6
Malignant neoplasm of cervix uteri 180	21.8	4.4	...	...	40.8	8.4
Malignant neoplasm of other female genital organs 179, 181–184	19.9	11.4	...	...	37.3	21.7
Malignant neoplasm of prostate 185	1.9	5.9	4.0	12.3	...	...
Leukemia 204–208	6.9	2.8	8.0	*2.8	5.9	*
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior 210–239	59.3	29.2	29.1	12.0	85.7	44.8
Benign neoplasm of uterus 218–219	29.9	11.0	...	...	56.1	21.0
Endocrine, nutritional and metabolic diseases and immunity disorders 240–279	65.7	77.4	51.8	58.2	77.9	94.7
Diabetes mellitus 250	41.2	55.1	40.0	45.9	42.3	63.5
Diseases of blood and blood-forming organs 280–289	11.9	10.8	8.3	9.2	15.0	12.3
Mental disorders 290–319	15.9	114.4	13.9	127.1	17.6	102.9
Diseases of the nervous system and sense organs 320–389	125.5	53.1	138.3	48.0	114.2	57.8
Disorders of the autonomic nervous system 337	*	*	*	*	*	*
Other disorders of the central nervous system 320–336, 340–349	33.4	22.2	39.7	21.9	28.0	22.5
Disorders of the peripheral nervous system 350–359	30.3	10.0	34.3	7.6	26.9	12.2
Cataract 366	11.0	7.1	11.2	7.1	10.8	7.0
Other disorders of the eye and adnexa 360–365, 367–379	36.0	7.8	36.7	6.8	35.4	8.8
Diseases of the ear and mastoid process 380–389	14.6	5.8	16.3	4.4	13.1	7.1
Diseases of the circulatory system 390–459	503.7	346.5	647.0	422.9	378.5	277.3
Rheumatic heart disease 390–398	33.5	6.1	25.5	*3.3	40.4	8.6
Essential hypertension 401	46.3	19.3	38.7	16.3	53.0	22.0
Hypertensive heart and renal disease 402–404	24.3	11.5	23.3	12.3	25.2	10.8
Acute myocardial infarction 410	62.3	45.9	105.0	73.6	24.9	20.9
Other acute and subacute forms of ischemic heart disease 411	23.6	12.0	32.6	14.1	15.8	10.1
Angina pectoris 413	16.8	13.6	21.6	14.2	12.6	13.0
Other chronic ischemic heart disease 412, 414	55.0	73.9	79.8	109.6	33.4	41.5
Diseases of pulmonary circulation 415–417	26.8	7.0	47.7	7.1	8.5	6.9
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders 420–426	22.2	12.9	23.5	15.2	21.1	10.8
Cardiac dysrhythmias 427	10.8	16.6	12.0	17.4	9.7	15.9
Heart failure 428	17.6	15.2	21.4	16.7	14.3	13.8
Ill-defined descriptions and complications of heart disease 429	5.6	6.1	6.3	7.7	5.0	4.7
Acute cerebrovascular disease 430–436	45.0	40.0	54.0	42.3	37.0	37.9

Table 8. Rates of discharge and days of care for patients 45–64 years of age, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and for all general hospitals in Poland. Data exclude normal deliveries (code 650). Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female		
	Poland	United States	Poland	United States	Poland	United States	
Rate of days of care per 1,000 population							
Atherosclerosis	440	48.9	6.8	78.6	8.8	22.8	*5.0
Other diseases of arteries, arterioles and capillaries	441-448	18.1	20.4	26.6	25.2	10.7	16.0
Diseases of veins and lymphatics, and other diseases of the circulatory system	451-459	34.9	31.7	34.1	31.3	35.5	31.9
Diseases of the respiratory system	460-519	240.1	113.2	340.4	118.5	152.4	108.4
Acute respiratory infections	460-466	7.8	9.1	7.8	7.6	7.9	10.5
Chronic disease of tonsils and adenoids	474	1.3	*0.2	1.1	*	1.4	*
Other diseases of upper respiratory tract	470-473, 475-478	23.0	5.4	30.7	5.7	16.2	5.2
Pneumonia	480-486	57.5	29.0	86.3	29.8	32.3	28.2
Influenza	487	0.4	2.8	0.5	*2.0	0.4	3.6
Bronchitis and emphysema	490-492	95.2	17.0	137.9	20.8	57.9	13.4
Asthma	493	25.3	15.9	27.2	13.3	23.7	18.2
Diseases of the digestive system	520-579	323.9	222.8	346.5	222.5	304.1	223.0
Diseases of oral cavity, salivary glands and jaw	520-529	3.1	4.1	3.8	4.0	2.4	4.1
Gastric and duodenal ulcer	531-532	71.8	18.0	107.9	21.1	40.3	15.3
Other diseases of esophagus, stomach and duodenum	530, 533-537	24.5	26.6	28.5	25.3	21.0	27.8
Appendicitis	540-543	22.6	4.1	23.3	4.8	22.0	3.6
Hernia of abdominal cavity	550-553	35.8	36.2	52.7	49.8	21.0	23.9
Noninfective enteritis and colitis	555-558	8.8	13.2	9.7	9.3	8.0	16.6
Other diseases of intestines and peritoneum	560-569	16.5	38.4	16.9	31.9	16.2	44.3
Chronic liver disease and cirrhosis	571	22.1	16.9	32.8	18.4	12.7	15.4
Disorders of gall bladder and biliary tract	574-576	96.5	41.8	51.1	29.5	136.2	53.0
Other diseases of digestive system	570, 572-573, 577-579	22.3	23.4	19.9	28.3	24.4	18.9
Diseases of the genitourinary system	580-629	143.1	117.1	103.3	91.2	178.0	140.6
Diseases of urinary system	580-599	76.5	47.1	73.3	48.9	79.4	45.4
Diseases of male genital organs	600-608	13.9	19.7	29.8	41.5	...	...
Disorders of breast	610-611	1.4	6.5	*	*0.9	2.5	11.6
Inflammatory disease of female pelvic organs	614-616	5.5	3.8	...	...	10.3	7.2
Disorders of menstruation and other abnormal bleeding from female genital tract	626	11.0	7.2	...	...	20.6	13.7
Complications of pregnancy, childbirth and the puerperium	630-676	1.7	*0.5	...	...	3.2	*1.0
Induced abortion	635-636	0.1	*	...	...	0.2	*
Other pregnancy with abortive outcome	630-634, 637-639	0.6	*	...	...	1.1	*
Complications of labor, delivery and the puerperium	652-676	0.4	*	...	...	0.7	*
Diseases of the skin and subcutaneous tissue	680-709	64.2	31.8	72.8	33.4	56.8	30.4
Diseases of the musculoskeletal system and connective tissue	710-739	179.3	135.1	168.1	111.8	189.1	156.1
Osteoarthritis and allied disorders	715	36.7	15.2	25.5	11.5	46.5	18.5
Other arthropathies and related disorders	710-714, 716-719	48.6	20.6	29.5	10.1	65.3	30.0
Intervertebral disc disorders	722	31.6	33.2	37.5	34.5	26.5	32.0
Other dorsopathies	720-721, 723-724	41.5	30.0	48.6	28.7	35.4	31.1
Rheumatism, excluding the back	725-729	9.3	16.3	11.7	12.2	7.1	19.9
Disorders of bone and cartilage	730-733	9.1	14.6	14.2	12.7	4.7	16.3
Congenital anomalies	740-759	2.2	7.5	2.5	7.1	2.0	7.8
Certain conditions originating in the perinatal period	760-779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions	780-799	15.8	15.5	16.5	13.2	15.2	17.6
Injury and poisoning	800-999	187.8	115.4	275.4	121.4	111.1	110.0
Fractures	800-829	110.9	44.5	158.8	36.5	69.0	51.8
Dislocations, sprains and strains	830-848	10.0	22.1	15.8	24.0	5.0	20.4
Intracranial injury, excluding those with skull fracture	850-854	11.6	5.2	17.8	7.8	6.2	2.8
Open wound and injury to blood vessels	870-904	16.0	5.4	25.7	8.5	7.6	*2.6
Burns	940-949	7.1	6.1	10.0	*8.2	4.6	*
Poisoning and toxic effects	960-989	4.1	2.6	5.3	*1.6	3.0	3.5
Complications of surgical and medical care not elsewhere classified	996-999	1.5	14.1	1.7	16.6	1.2	11.8
Supplementary classification of factors influencing health status and contact with health services	V01-V82	4.4	9.3	5.0	8.2	3.9	10.2

Table 9. Rates of discharge and days of care for patients 65 years of age and over, by sex and diagnosis: Poland and the United States, 1980

[Data are for short-stay non-Federal hospitals in the United States and from all general hospitals in Poland. Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code	Both sexes		Male		Female	
	Poland	United States	Poland	United States	Poland	United States
Discharge rate per 1,000 population						
All conditions	163.3	383.7	200.8	411.8	139.8	364.7
Infectious and parasitic diseases 001-139	5.2	4.7	7.4	4.7	3.8	4.8
Intestinal infectious diseases 001-009	0.2	0.8	0.2	*0.6	0.2	0.8
Tuberculosis 010-018	2.9	*0.2	4.9	*	1.6	*
Viral hepatitis 070	1.1	*	1.2	*	1.0	*
Neoplasms 140-239	16.8	40.3	23.7	51.0	12.5	33.0
Malignant neoplasms 140-208	15.1	35.6	21.5	46.2	11.1	28.5
Malignant neoplasm of stomach 151	2.0	1.0	3.2	1.3	1.3	0.7
Malignant neoplasm of other digestive organs and peritoneum 150, 152-159	3.2	6.7	3.7	8.0	2.8	5.8
Malignant neoplasm of trachea, bronchus and lung 162	2.5	5.3	5.3	10.1	0.7	2.1
Malignant neoplasm of breast 174-175	0.9	3.3	*	*	1.3	5.5
Malignant neoplasm of cervix uteri 180	0.7	0.4	...	...	1.1	0.7
Malignant neoplasm of other female genital organs 179, 181-184	0.9	2.2	...	...	1.4	3.8
Malignant neoplasm of prostate 185	0.6	3.9	1.5	9.8	...	...
Leukemia 204-208	0.5	1.3	0.8	1.8	0.4	0.9
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior 210-239	1.7	4.6	2.2	4.8	1.4	4.5
Benign neoplasm of uterus 218-219	0.1	*	...	...	0.2	*
Endocrine, nutritional and metabolic diseases and immunity disorders 240-279	4.2	16.2	3.1	12.3	4.9	18.8
Diabetes mellitus 250	3.6	9.4	2.7	7.4	4.1	10.8
Diseases of blood and blood-forming organs 280-289	1.1	4.5	1.0	4.2	1.2	4.7
Mental disorders 290-319	0.4	9.4	0.3	9.9	0.4	9.1
Diseases of the nervous system and sense organs 320-389	7.0	23.6	7.5	22.8	6.6	24.0
Disorders of the autonomic nervous system 337	-	*	-	*	-	*
Other disorders of the central nervous system 320-336, 340-349	1.1	4.2	1.4	4.9	0.9	3.8
Disorders of the peripheral nervous system 350-359	0.7	2.0	0.7	1.9	0.7	2.0
Cataract 366	2.1	12.3	2.0	11.3	2.1	12.9
Other disorders of the eye and adnexa 360-365, 367-379	2.8	3.4	3.0	3.4	2.7	3.5
Diseases of the ear and mastoid process 380-389	0.3	1.7	0.4	1.3	0.3	1.9
Diseases of the circulatory system 390-459	57.5	110.8	68.7	121.9	50.5	103.4
Rheumatic heart disease 390-398	0.9	0.5	0.7	*	1.0	0.7
Essential hypertension 401	2.9	4.2	1.8	2.9	3.6	5.0
Hypertensive heart and renal disease 402-404	2.0	3.5	1.4	2.7	2.4	4.0
Acute myocardial infarction 410	4.3	9.3	6.5	12.0	2.8	7.5
Other acute and subacute forms of ischemic heart disease 411	1.3	3.1	1.6	3.3	1.1	3.1
Angina pectoris 413	0.8	3.3	1.2	4.0	0.6	2.8
Other chronic ischemic heart disease 412, 414	5.3	20.1	6.3	23.3	4.7	17.9
Diseases of pulmonary circulation 415-417	3.7	1.6	7.5	1.6	1.3	1.5
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders 420-426	4.1	3.1	4.9	3.4	3.7	2.9
Cardiac dysrhythmias 427	1.3	8.8	1.4	9.7	1.3	8.1
Heart failure 428	6.0	13.6	7.1	14.2	5.2	13.1
Ill-defined descriptions and complications of heart disease 429	1.3	3.9	1.2	4.3	1.4	3.6
Acute cerebrovascular disease 430-436	5.9	18.3	6.4	20.2	5.6	17.0
Atherosclerosis 440	13.7	3.1	16.1	3.7	12.2	2.7
Other diseases of arteries, arterioles and capillaries 441-448	1.0	4.5	1.5	6.6	0.7	3.0
Diseases of veins and lymphatics, and other diseases of the circulatory system 451-459	1.8	5.7	1.8	5.4	1.8	5.9
Diseases of the respiratory system 460-519	18.3	38.5	27.1	49.4	12.8	31.1
Acute respiratory infections 460-466	0.6	3.6	0.7	3.2	0.6	3.8
Chronic disease of tonsils and adenoids 474	0.0	*	*	*	*	*
Other diseases of upper respiratory tract 470-473, 475-478	0.9	1.2	1.4	1.3	0.6	1.1
Pneumonia 480-486	6.8	11.9	8.8	15.0	5.5	9.7
Influenza 487	0.0	1.4	*	1.4	*	1.4
Bronchitis and emphysema 490-492	7.1	5.3	11.7	7.2	4.2	4.1
Asthma 493	1.4	3.3	2.1	3.0	1.0	3.4
Diseases of the digestive system 520-579	19.7	49.1	22.8	49.9	17.8	48.6
Diseases of oral cavity, salivary glands and jaw 520-529	0.2	0.9	0.2	*0.6	0.1	1.0
Gastric and duodenal ulcer 531-532	2.6	3.8	4.1	4.5	1.7	3.3
Other diseases of esophagus, stomach and duodenum 530, 533-537	1.8	6.0	2.2	6.3	1.5	5.7
Appendicitis 540-543	1.1	0.4	1.2	*	1.1	*0.3
Hernia of abdominal cavity 550-553	3.1	8.9	5.2	13.3	1.8	5.9
Noninfective enteritis and colitis 555-558	0.7	5.0	0.7	3.7	0.7	5.9
Other diseases of intestines and peritoneum 560-569	1.5	11.5	1.8	9.1	1.3	13.1
Chronic liver disease and cirrhosis 571	1.1	1.1	1.7	1.3	0.8	0.9
Disorders of gall bladder and biliary tract 574-576	6.3	7.3	4.4	6.2	7.5	8.0
Other diseases of digestive system 570, 572-573, 577-579	1.4	4.4	1.3	4.4	1.4	4.5

Table 9. Rates of discharge and days of care for patients 65 years of age and over, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and from all general hospitals in Poland. Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code		Both sexes		Male		Female	
		Poland	United States	Poland	United States	Poland	United States
Discharge rate per 1,000 population							
Diseases of the genitourinary system	580-629	10.0	26.9	15.3	38.3	6.6	19.3
Diseases of urinary system	580-599	4.5	14.0	5.6	17.1	3.8	12.0
Diseases of male genital organs	600-608	3.7	8.4	9.7	20.7	...	...
Disorders of breast	610-611	*	0.8	*	*	*	1.1
Inflammatory disease of female pelvic organs	614-616	0.1	*0.3	...	...	0.2	*0.4
Disorders of menstruation and other abnormal bleeding from female genital tract	626	0.3	*	...	...	0.5	*
Complications of pregnancy, childbirth and the puerperium	630-676	...	...	...	...	...	...
Induced abortion	635-636	...	...	...	...	...	...
Other pregnancy with abortive outcome	630-634, 637-639	...	...	...	...	...	...
Complications of labor, delivery and the puerperium	652-676	...	...	...	...	...	...
Diseases of the skin and subcutaneous tissue	680-709	3.4	5.2	3.3	4.3	3.4	5.7
Diseases of the musculoskeletal system and connective tissue	710-739	5.1	20.4	4.2	14.7	5.7	24.3
Osteoarthritis and allied disorders	715	1.9	4.4	1.3	2.7	2.3	5.5
Other arthropathies and related disorders	710-714, 716-719	1.6	2.7	1.1	1.9	1.9	3.2
Intervertebral disc disorders	722	0.1	1.6	0.2	1.3	0.1	1.7
Other dorsopathies	720-721, 723-724	1.0	3.9	1.1	3.6	0.9	4.2
Rheumatism, excluding the back	725-729	0.2	2.7	0.2	2.3	*0.2	2.9
Disorders of bone and cartilage	730-733	0.2	4.4	0.2	2.4	0.2	5.8
Congenital anomalies	740-759	0.0	0.8	*	*0.7	0.1	0.8
Certain conditions originating in the perinatal period	760-779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions	780-799	1.9	3.7	2.1	4.4	1.7	3.3
Injury and poisoning	800-999	12.5	27.4	14.1	20.9	11.5	31.7
Fractures	800-829	7.6	14.6	7.5	7.7	7.7	19.2
Dislocations, sprains and strains	830-848	0.4	2.2	0.6	1.8	0.4	2.4
Intracranial injury, excluding those with skull fracture	850-854	0.7	1.1	1.0	1.3	0.5	1.0
Open wound and injury to blood vessels	870-904	0.9	1.0	1.3	1.3	0.7	0.9
Burns	940-949	0.2	0.4	0.3	*	0.2	*0.4
Poisoning and toxic effects	960-989	0.4	0.7	0.5	*0.7	0.3	0.7
Complications of surgical and medical care not elsewhere classified	996-999	0.1	2.9	0.1	3.5	0.1	2.5
Supplementary classification of factors influencing health status and contact with health services	V01-V82	0.3	2.1	0.3	2.3	0.2	2.0
Rate of days of care per 1,000 population							
All conditions		3,604.0	4,098.1	4,380.5	4,243.6	3,115.7	3,999.8
Infectious and parasitic diseases	001-139	271.4	53.4	406.2	49.9	186.6	55.7
Intestinal infectious diseases	001-009	2.3	4.7	2.3	*3.3	2.3	5.6
Tuberculosis	010-018	189.9	*3.3	314.5	*	111.6	*
Viral hepatitis	070	44.1	*	48.2	*	41.5	*
Neoplasms	140-239	416.4	503.8	572.6	618.7	318.2	426.1
Malignant neoplasms	140-208	385.2	466.1	531.5	587.8	293.2	383.8
Malignant neoplasm of stomach	151	44.6	16.3	65.6	24.4	31.4	10.9
Malignant neoplasm of other digestive organs and peritoneum	150, 152-159	74.3	111.3	78.7	121.4	71.5	104.4
Malignant neoplasm of trachea, bronchus and lung	162	78.3	68.1	163.6	128.0	24.7	27.7
Malignant neoplasm of breast	174-175	22.0	43.2	*	*	35.2	72.0
Malignant neoplasm of cervix uteri	180	17.6	3.4	...	...	28.7	5.7
Malignant neoplasm of other female genital organs	179, 181-184	19.3	24.0	...	...	31.5	40.2
Malignant neoplasm of prostate	185	13.3	43.4	34.6	107.7	...	...
Leukemia	204-208	13.1	15.3	16.9	22.4	10.7	10.5
Benign neoplasms, carcinoma in situ, and neoplasms of uncertain behavior	210-239	31.2	37.7	41.1	30.9	25.0	42.3
Benign neoplasm of uterus	218-219	1.0	*	...	...	1.7	*
Endocrine, nutritional and metabolic diseases and immunity disorders	240-279	89.6	192.1	65.0	145.3	105.1	223.7
Diabetes mellitus	250	75.7	120.1	57.1	92.6	87.3	138.6
Diseases of blood and blood-forming organs	280-289	26.4	43.9	22.9	36.7	28.7	48.7
Mental disorders	290-319	9.7	129.3	12.1	125.7	8.1	131.7
Diseases of the nervous system and sense organs	320-389	153.4	146.1	164.5	157.5	146.4	138.4
Disorders of the autonomic nervous system	337	-	*	-	*	-	*
Other disorders of the central nervous system	320-336, 340-349	26.9	59.3	34.4	77.1	22.2	47.2
Disorders of the peripheral nervous system	350-359	14.6	14.2	16.2	15.6	13.7	13.3
Cataract	366	51.0	45.6	51.9	39.1	50.4	50.0
Other disorders of the eye and adnexa	360-365, 367-379	55.8	17.6	56.3	18.1	55.6	17.3
Diseases of the ear and mastoid process	380-389	5.1	8.8	5.7	6.2	4.6	10.5
Diseases of the circulatory system	390-459	1,131.8	1,238.8	1,332.5	1,322.9	1,005.6	1,181.9
Rheumatic heart disease	390-398	16.9	6.2	14.4	*	18.5	9.0
Essential hypertension	401	46.5	35.0	27.8	24.6	58.3	42.0
Hypertensive heart and renal disease	402-404	36.5	38.0	25.2	26.1	43.6	46.0
Acute myocardial infarction	410	90.8	120.6	132.8	149.2	64.4	101.2
Other acute and subacute forms of ischemic heart disease	411	23.2	26.0	27.4	23.0	20.5	28.0
Angina pectoris	413	13.2	21.1	19.9	24.0	9.0	19.2

Table 9. Rates of discharge and days of care for patients 65 years of age and over, by sex and diagnosis: Poland and the United States, 1980—Con.

[Data are for short-stay non-Federal hospitals in the United States and from all general hospitals in Poland. Diagnostic categories and code numbers are from the Ninth Revision, International Classification of Diseases, 1975]

Diagnosis and ICD-9 code		Both sexes		Male		Female	
		Poland	United States	Poland	United States	Poland	United States
Rate of days of care per 1,000 population							
Other chronic Ischemic heart disease	412, 414	95.1	215.0	102.9	243.3	90.1	195.9
Diseases of pulmonary circulation	415-417	77.5	20.7	157.4	19.7	27.3	21.3
Diseases of the pericardium and endocardium, cardiomyopathy and conduction disorders	420-426	77.4	33.1	86.6	36.3	71.6	31.0
Cardiac dysrhythmias	427	19.9	77.2	19.8	82.8	20.0	73.5
Heart failure	428	103.8	142.0	114.7	145.1	96.9	140.0
Ill-defined descriptions and complications of heart disease	429	24.7	39.9	25.0	37.9	24.5	41.2
Acute cerebrovascular disease	430-436	120.2	237.1	128.3	250.0	115.1	228.5
Atherosclerosis	440	283.2	44.6	338.8	59.3	248.2	34.7
Other diseases of arteries, arterioles and capillaries	441-448	22.7	62.8	37.5	92.0	13.4	43.0
Diseases of veins and lymphatics, and other diseases of the circulatory system	451-459	52.1	63.2	46.6	56.3	55.5	67.8
Diseases of the respiratory system	460-519	426.8	376.9	643.0	483.8	290.8	304.6
Acute respiratory infections	460-466	9.8	25.0	9.3	22.2	10.1	26.9
Chronic disease of tonsils and adenoids	474	0.2	*	*	*	*	*
Other diseases of upper respiratory tract	470-473, 475-478	11.7	5.0	17.7	4.7	7.8	5.2
Pneumonia	480-486	152.3	132.2	193.4	166.1	126.4	109.2
Influenza	487	0.3	10.4	*	8.8	*	11.4
Bronchitis and emphysema	490-492	182.3	47.7	310.5	62.7	101.7	37.6
Asthma	493	30.6	27.5	45.9	24.0	21.1	29.9
Diseases of the digestive system	520-579	353.4	462.1	388.3	443.7	331.5	474.5
Diseases of oral cavity, salivary glands and jaw	520-529	2.2	4.7	2.2	*3.2	2.1	5.7
Gastric and duodenal ulcer	531-532	53.1	41.3	79.4	51.5	36.5	34.4
Other diseases of esophagus, stomach and duodenum	530, 533-537	25.9	47.6	31.5	50.1	22.3	46.0
Appendicitis	540-543	18.6	4.6	18.4	*	18.7	*4.2
Hernia of abdominal cavity	550-553	44.8	67.2	72.4	90.6	27.3	51.4
Noninfective enteritis and colitis	555-558	9.7	39.6	10.3	28.6	9.3	47.0
Other diseases of intestines and peritoneum	560-569	20.1	111.5	23.2	81.3	18.1	131.8
Chronic liver disease and cirrhosis	571	27.9	13.7	39.4	19.0	20.6	10.1
Disorders of gall bladder and biliary tract	574-576	123.3	86.1	86.5	71.7	146.4	95.9
Other diseases of digestive system	570, 572-573, 577-579	28.1	45.8	25.0	42.3	30.1	48.2
Diseases of the genitourinary system	580-629	174.0	237.5	286.0	343.9	103.6	165.7
Diseases of urinary system	580-599	76.5	127.9	90.6	149.2	67.6	113.6
Diseases of male genital organs	600-608	75.4	77.9	195.3	193.1	...	...
Disorders of breast	610-611	*	3.2	*	*	*	4.4
Inflammatory disease of female pelvic organs	614-616	1.0	*1.5	...	...	1.6	*2.6
Disorders of menstruation and other abnormal bleeding from female genital tract	626	1.7	*	...	...	2.8	*
Complications of pregnancy, childbirth and the puerperium	630-676	...	...	...	...	...	...
Induced abortion	635-636	...	...	...	...	...	...
Other pregnancy with abortive outcome	630-634, 637-639	...	...	...	...	...	...
Complications of labor, delivery and the puerperium	652-676	...	...	...	...	...	...
Diseases of the skin and subcutaneous tissue	680-709	117.6	66.3	93.0	49.6	133.1	77.5
Diseases of the musculoskeletal system and connective tissue	710-739	148.9	237.9	110.4	165.1	173.2	287.1
Osteoarthritis and allied disorders	715	55.4	56.8	35.4	35.4	68.0	71.3
Other arthropathies and related disorders	710-714, 716-719	52.7	33.5	32.5	20.4	65.5	42.4
Intervertebral disc disorders	722	4.4	18.8	3.8	14.7	4.7	21.5
Other dorsopathies	720-721, 723-724	23.0	43.8	23.5	42.3	22.7	44.8
Rheumatism, excluding the back	725-729	4.3	17.9	5.0	13.7	3.9	20.7
Disorders of bone and cartilage	730-733	7.2	61.5	8.4	34.1	6.5	79.9
Congenital anomalies	740-759	0.8	8.0	*	*6.6	1.1	9.0
Certain conditions originating in the perinatal period	760-779	-	*	-	*	-	*
Symptoms, signs and ill-defined conditions	780-799	27.7	28.0	30.5	29.3	25.9	27.1
Injury and poisoning	800-999	253.1	360.3	250.0	250.9	255.0	434.2
Fractures	800-829	189.5	236.7	167.6	129.0	203.2	309.5
Dislocations, sprains and strains	830-848	5.6	16.4	7.8	13.1	4.2	18.6
Intracranial injury, excluding those with skull fracture	850-854	9.0	10.4	12.3	14.4	6.9	7.7
Open wound and injury to blood vessels	870-904	13.2	7.6	17.6	7.3	10.5	7.7
Burns	940-949	6.4	10.6	7.1	*	5.9	*11.0
Poisoning and toxic effects	960-989	3.2	6.6	3.0	*8.2	3.4	5.5
Complications of surgical and medical care not elsewhere classified	996-999	1.3	33.8	1.8	37.5	0.9	31.3
Supplementary classification of factors influencing health status and contact with health services	V01-V82	3.0	13.8	3.1	14.1	2.9	13.6

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Appendix I

Sources of data

Characteristic	United States	Poland
Data system	The National Hospital Discharge Survey (NHDS) is conducted by the National Center for Health Statistics.	The General Hospital Morbidity Study (GHMS) is supervised and coordinated by the National Institute of Hygiene.
Background	The survey has been in operation continuously since 1965. The original universe for the survey consisted of the 6,965 short-stay hospitals listed in the 1963 National Master Facility Inventory (NMFI). The NMFI is a comprehensive list of U.S. hospitals, nursing homes, and other inpatient facilities compiled by NCHS (NCHS, 1965). The universe was updated in 1979 and, in addition to the original universe, included 1,052 new hospitals.	The study was established by the Ministry of Health and Social Welfare in the mid-1950's as part of the Ministry's information system. Originally, data were collected on all patients, but only data on patients discharged dead, patients with certain rare diseases, and a 20-percent sample of other patients were processed. Beginning in January 1979, the study was changed so that data were collected on a 10-percent sample of patients discharged alive or dead. The list of hospitals covered by the study is verified every year. The central hospitals in each Province are responsible for the addition of new hospitals to the study.
Scope	Hospitals in the 50 States and the District of Columbia in which the average length of stay is less than 30 days are covered by the survey, with the following exceptions: institutional hospitals, such as prison hospitals and university student health centers; Federal hospitals, such as military and Veterans' Administration hospitals; and hospitals with fewer than six beds. Patients in long-term care units of hospitals covered by the survey are sometimes excluded if the units keep records separately from the rest of the hospital. The discharges of females hospitalized for delivery and of newborn infants are covered by the survey. However, in this report, females whose only diagnosis was normal delivery and newborn infants without any diagnosis other than single or multiple birth were excluded.	All hospitals operated by the Ministry of Health and Social Welfare and the Ministry of Transportation are covered by the study. This includes general hospitals and tuberculosis sanitariums. The few hospitals under the control of the Ministry of National Defense and the Ministry of Internal Affairs and Justice are not covered. Patients treated in nonpsychiatric units of neuropsychiatric hospitals, such as neurology units, are within the scope of GHMS. The discharges of females hospitalized for normal delivery and of healthy newborn infants are not covered by the study (see appendix II for further information).
Sample size	In 1980 the NHDS sample consisted of 544 hospitals. Of these, 72 refused to participate and 52 were out of scope, either because the hospital had gone out of business or because it failed to meet the definition of a short-stay hospital. Thus, 420 hospitals participated in the survey during 1980, and they provided approximately 224,000 abstracts of medical records.	In 1980 the discharges from 641 general hospitals, 30 tuberculosis sanitariums, and the nonpsychiatric units of 40 neuropsychiatric hospitals were sampled for the GHMS. Participation in the study is mandatory. The hospitals reported data on approximately 364,000 discharges.

A list of references follows the text.

Characteristic	United States	Poland
Sample design	A two-stage, stratified sampling design is used in the survey. The first stage is selection of a sample of hospitals. The primary stratification variables are bed size and geographic region. Hospitals are selected in direct proportion to size. Hospitals with 1,000 beds or more in the universe of short-stay hospitals are selected with certainty, and the sampling probability decreases to 1 in 40 for the smallest hospitals. The second stage is a systematic sample of discharges from the sampled hospitals. The discharges are selected in inverse proportion to hospital size to compensate for the higher probability of selection of the larger hospitals. This ensures that the overall probability of selecting a discharge is approximately the same in each size class. The sampling frame in nearly all the hospitals is the daily listing of discharges. A systematic sampling technique is used, usually based on the terminal digit of the patient's medical record number.	Beginning in 1979, a systematic sample of 10 percent of discharges was drawn in each hospital within the scope of GHMS. The sampling frame is the hospital's admission book. If the terminal digit of the patient's hospital number is a 6, the patient is included in the sample. Exceptions are patients in psychiatric units, who are excluded, and females admitted for delivery, who are excluded unless their delivery is complicated or other conditions arise that lengthen their hospital stay (see appendix II). Newborn infants are not listed in the admission book unless they have a condition that requires treatment during their hospitalization. Data are collected on all patients in psychiatric hospitals in a separate psychiatric study, and information on every tenth discharge from the nonpsychiatric units is reported to the GHMS.
Data collection procedures	An abstract form is completed for each sample discharge, using information from the patient's medical record. In about 55 percent of the hospitals participating in the survey in 1980, the sample selection and abstracting were done by the medical records staff of the hospital. In the rest of the hospitals, the work was performed by personnel of the U.S. Bureau of the Census, acting for NCHS. Completed abstracts, along with sample selection control sheets, are sent to a Census Regional Office, where the forms are checked for completeness. The abstracts are next sent to NCHS, where all abstract information, including diagnoses and surgical procedures, are coded. The data are then transferred to computer tapes, edited, and processed.	A statistical form is completed for each patient included in the GHMS sample. The nonmedical information is filled in by the hospital administrative staff at the time the patient is admitted. The medical data are recorded and coded by the patient's physician and confirmed by the ward's head physician or a physician specially appointed to review all the hospital's forms. The medical records department inserts the discharge date and patient's length of stay after discharge. Each month, hospitals send completed forms and a list of the sequential numbers in their admission books to the central hospital in the Province for review. The forms are then forwarded to the National Institute of Hygiene, where they are transferred to computer files for editing and processing.
Items collected	The abstract form (figure I) used in the NHDS includes items for patient identification, such as hospital, survey, and medical record numbers; date of admission and discharge; and ZIP Code of residence. Patient characteristics recorded include sex, date of birth or age, race, ethnicity, marital status, expected source of payment, and the discharge status and disposition of the case. The medical information consists of discharge diagnoses, surgical and diagnostic procedures, and the dates of procedures. Diagnoses and procedures are listed, with the principal diagnosis (or the one listed first, if a principal one is not identified) followed by the other diagnoses as entered on the face sheet of the medical record.	The statistical form completed for each patient in the sample includes items for patient identification, such as the patient's number from the admission book, admission and discharge dates and length of stay, and identification numbers for the hospital and Province (figure II). Patient characteristics recorded include sex, date of birth and age, type of residence (urban or rural), place of residence, and occupational activity. The medical information (figure III) consists of the principal diagnosis indicated by the physician in the discharge summary, the number of times the patient was hospitalized during the year, and for deaths, the underlying cause of death according to the death certificate and autopsy report.
Medical coding	Diagnoses and procedures listed on the NHDS abstract are coded using the <i>International Classification of Diseases, 9th Revision, Clinical Modification</i> (ICD-9-CM) (U.S. Public Health Service and Health Care Financing Administration, 1980), which is completely compatible with ICD-9 at the level of three-digit codes.	The diagnoses and causes of death reported for patients in the sample were assigned three-digit codes according to the Ninth Revision, International Classification of Diseases (ICD-9) (World Health Organization, 1977).

A list of references follows the text.

A. PATIENT IDENTIFICATION

4. Date of admission . . .

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5. Date of discharge . .

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6. Residence ZIP code

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8. Age (Complete only if date of birth not given)

Units

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$\left\{ \begin{array}{l} 1 \square \text{ Years} \\ 2 \square \text{ Months} \\ 3 \square \text{ Days} \end{array} \right.$

3 ☐ Not stated

5. ☐ Other (Specify) _____

⁶ ☐ Not stated

3 ☐ Not stated

5 ☐ Separated

☐ Not stated

14. Status/Disposition of patient
(Mark (X) appropriate box(es))

1000000

Status	Disposition
* <input type="checkbox"/> Alive ➡	a. <input type="checkbox"/> Routine discharge/ discharged home b. <input type="checkbox"/> Left against medical advice c. <input type="checkbox"/> Discharged, transferred to another short-term hospital d. <input type="checkbox"/> Discharged, transferred to long-term care institution e. <input type="checkbox"/> Disposition not stated

3 ☐ Status not stated

Principal: _____

Other/additional: _____

☐ See reverse side

Principal: _____

Other/additional: _____

 See reverse side

Date _____

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Formularz Mz/Szp-11 KARTA STATYSTYCZNA SZPITALNA OGÓLNA dla dorosłych, młodzieży i dzieci		A. Nr księgi głównej
Pieczęć szpitala	B. Przyjęty 19.....r. <div style="text-align: center; font-size: small;">dzień, m-c</div>	C. Wypisany 19.....r. <div style="text-align: center; font-size: small;">dzień, m-c</div>
	D. Liczba dni leczenia 	
	1. Numer szpitala	6. Miejsce stałego zamieszkania
	2. Województwo położenia szpitala	a) miasto b) gmina c) zagranica d) województwo zamieszkania
3. Nazwisko <div style="text-align: right; font-size: small;">E.</div> imię	7. Stosunek do pracy <div style="margin-top: 10px;"> a) czynny zawodowo b) bierny zawodowo c) cudzoziemiec </div>	5. Wiek chorego: a) poniżej 1 m-ca (noworodek) b) 1—11 m-cy i 30 dni (niemowlę) c) powyżej 1 roku
4. Data urodzenia: dzień m-c rok 19.....		5.) Dla cudzoziemców wpisać symbol „OO” 5) Rolników w wieku 16—70 lat należy traktować jako pracujących (czynnych zawodowo)

TRANSLATION: A. Admission number. B. Admission date. C. Discharge date. D. Length of stay. E. Sex. 1. Hospital number. 2. Province of hospital. 3. Patient's name. 4. Date of birth (day, month, year). 5. Age: a) Less than 1 month (newborn), b) 1 month—11 months 30 days (infant), c) 1 year or more. 6. Patient's place of residence: a) name of town, b) name of rural area (county), c) name of country if foreigner, d) province. 7. Occupational activity: a) active, b) nonactive, c) foreigner.

Figure II. Front of medical abstract for the Polish General Hospital Morbidity Study

Characteristic	United States	Poland
Missing data	In 1980, the age and/or sex of the patient were missing from the face sheet of the medical record in fewer than 0.25 percent of cases. When these items were missing, imputations were made by assigning the patient an age and/or sex consistent with the age or sex of other patients with the same diagnostic code. In the rare instances when dates of admission or discharge could not be obtained, a length of stay was imputed by assigning a length of stay characteristic of other patients of the same age.	All statistical forms are checked for completeness on the hospital, regional, and central levels. Missing information is obtained from the hospital records, and hospital records are consulted when errors are found in the data during the editing process. Checks are also made to assure that the sample is complete. All patients with admission numbers ending in 6 must be accounted for. The hospital must submit a statistical form or notify the regional and central authorities that the patient was not within the scope of the survey (for example, the patient was on a psychiatric unit, was a maternity patient, or was not discharged during the calendar year).

<p>8. Choroba zasadnicza wg rozpoznania klinicznego</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>9. Po raz który przebywa w szpitalu w danym roku kalendarzowym wg daty wypisu niezależnie od przyczyny (choroby)</p>	<p>Wpisać symbol lub znak X</p> <p>1) <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table></p> <p>6) <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table></p>	<p>10. Przyczyna zgonu wyjściowa wg karty zgonu</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>.....</p> <p style="text-align: center;">Pieczałka i podpis lekarza wypełniającego kartę</p> <p>.....</p> <p style="text-align: center;">Pieczałka i podpis ordynatora</p> <p>.....</p> <p>11. Rozpoznanie sekcyjne przyczyny zgonu</p> <p>.....</p> <p>.....</p> <p>.....</p> <p style="text-align: center;">Podpis lekarza wykonującego sekcję</p>	<p>Wpisać symbol lub znak X</p> <p>1) 7) <table border="1" style="display: inline-table; width: 40px; height: 20px; vertical-align: middle;"></table></p> <p>1) 7) 8) <table border="1" style="display: inline-table; width: 60px; height: 20px; vertical-align: middle;"></table></p>
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1) Wpisać liczbę wskazującą który to jest pobyt

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7) Dla osób wypisanych ze szpitala w kratki należy wstawić „X”

8) Jeśli sekcji nie było lub nie uzyskano jej wyników należy w kratki wpisać symbol „000”

TRANSLATION: 8. Principal diagnosis according to the discharge summary. 9. Number of times in any hospital during the year regardless of the diagnosis. 10. Underlying cause of death according to death certificate—seal and signature of physician responsible for patient care; seal and signature of physician in charge of ward. 11. Cause of death according to autopsy report—signature of pathologist.

Figure III. Back of medical abstract for the Polish General Hospital Morbidity Study

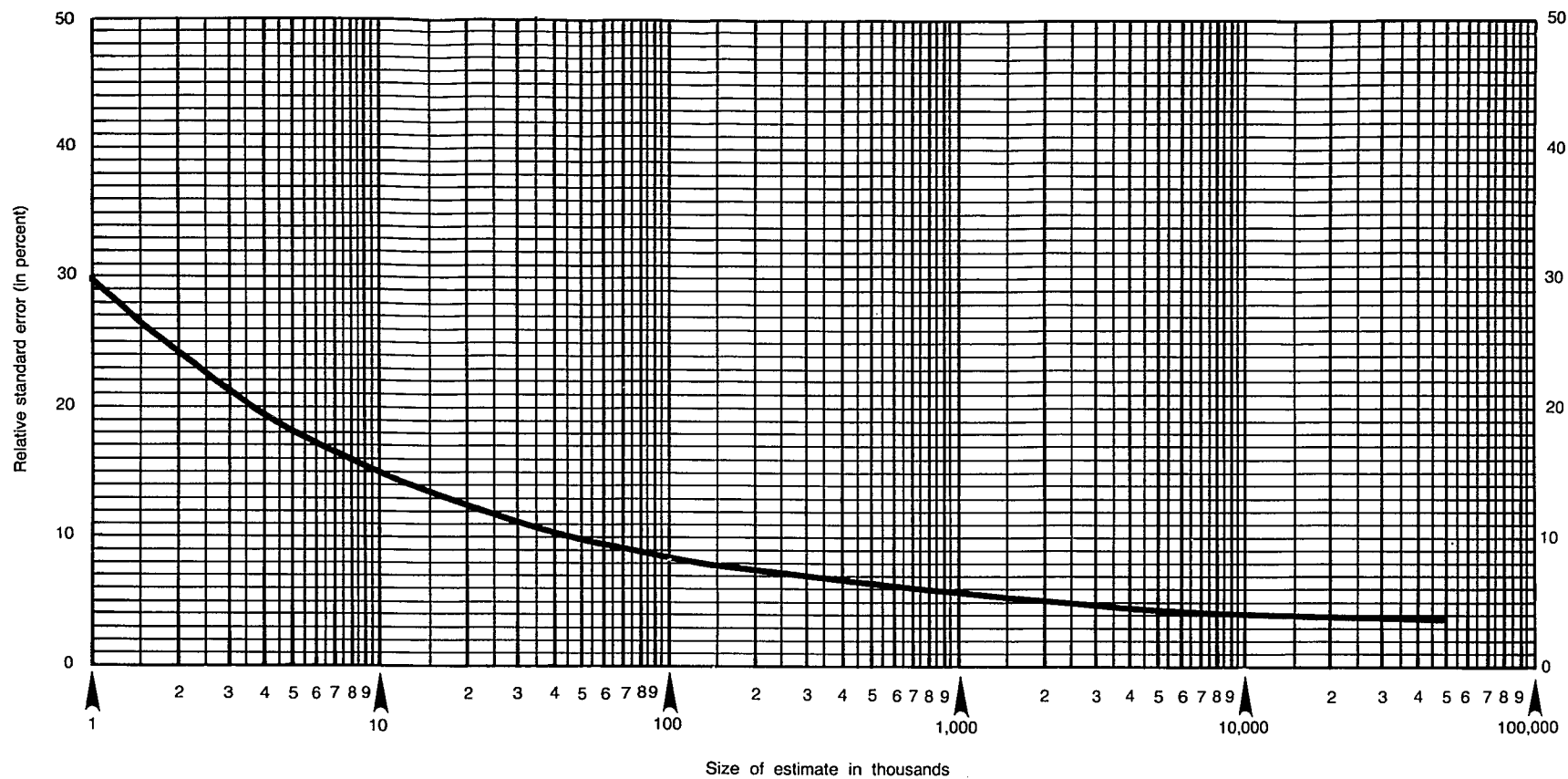
Characteristic	United States	Poland
Release of data	Annual reports of data from the survey are published by NCHS in <i>Advance Data</i> and in <i>Vital and Health Statistics</i> , Series 13. These reports update data on hospital utilization, diagnoses, and procedures, by characteristics of patients and hospitals. Special reports are also published on selected topics, such as expected source of payment, hospital use by children, and diagnosis-related groups (DRG's). Unpublished data from the survey are available on request from the NCHS Division of Health Care Statistics, and data for 1970 and subsequent years are available on public use tapes.	Data from the GHMS are not routinely published. Standard tables are tabulated for the Ministry of Health and Social Welfare each year. These tables present the numbers of and rates for patients discharged and their average lengths of stay by diagnosis, sex, age, and type and place of residence. Separate tabulations of these data for each Province are also prepared. The data are available for special analysis from the Department of Medical Statistics, National Institute of Hygiene.

Appendix II

Technical notes on methods

Characteristic	United States	Poland
Estimation	Statistics produced by the National Hospital Discharge Survey (NHDS) are derived using a complex estimating procedure. The basic unit of estimation is the sample inpatient discharge abstract. The estimating procedure used to produce essentially unbiased national estimates in NHDS has three principal components: inflation by reciprocals of the probabilities of sample selection, adjustment for nonresponse, and ratio adjustment to fixed totals. These components of estimation are described in appendix I of two earlier publications (NCHS, 1967a, 1967b).	National estimates can be obtained from the data collected in the General Hospital Morbidity Study (GHMS) by multiplying the numbers in the sample by 10.
Sampling error	The standard error is the sampling variability that occurs by chance because only a sample, rather than an entire universe, is surveyed. The relative standard error of an estimate is obtained by dividing the standard error by the estimate itself and is expressed as a percent of the estimate. The relative standard errors applicable to estimates of patients discharged or diagnoses are shown in figure IV. Relative standard errors for estimates of patient care days are shown in figure V.	The relative standard errors for data from the GHMS are shown for patients discharged or for diagnoses in figure VI. Relative standard errors for estimates of patient care days are shown in figure VII.
Measurement error	As in any survey, NHDS data are subject to reporting and processing errors due to nonresponse. The reliability of the abstracting and coding of NHDS data have been studied by the Institute of Medicine (IOM). The dates of admission and discharge, as well as patient's age, race, marital status, and disposition, were found to be highly reliable. The reliability of data on diagnoses and procedures was found to vary by level of coding specificity. Reliability increased when codes were condensed from four to three digits and was highest for codes grouped into the major diagnostic categories. A detailed account of these and other findings from the IOM study has been published (Institute of Medicine, 1980).	The lower discharge rate for infants under 1 year in Poland than in the United States suggested that they may have been underreported in the GHMS. Beginning in 1984, females admitted to Polish hospitals for delivery were included in the study whether the delivery was normal or complicated. Beginning in 1985, each time a female with a delivery was included in the sample (that is, had an admission number ending in 6), her newborn infant was also included, regardless of health status. Using this procedure, the total discharge rate for sick newborn infants did not change, but the rate of discharge for infants with perinatal conditions was reported to be 81 percent higher in 1985 than in 1980. Further, the discharge rate reported for complications of pregnancy, childbirth, and the puerperium was 20 percent higher for females 15-44 years in 1985 than in 1980, even though the number of births increased by only 1 percent from 1980 to 1985.

A list of references follows the text.



EXAMPLE: As shown in table 4, the U.S. discharge rate for diabetes mellitus is 2.9 per 1,000 population. The number of discharges for diabetes is approximately 654,000 (2.9 times the population in thousands, 225,552). The relative standard error of this estimate, as read from the curve, is approximately 6.2 percent. The standard error of the discharge rate is thus 0.18 (6.2 percent of 2.9).

Figure IV. Approximate relative standard errors for number of patients discharged or for diagnoses: United States, 1980

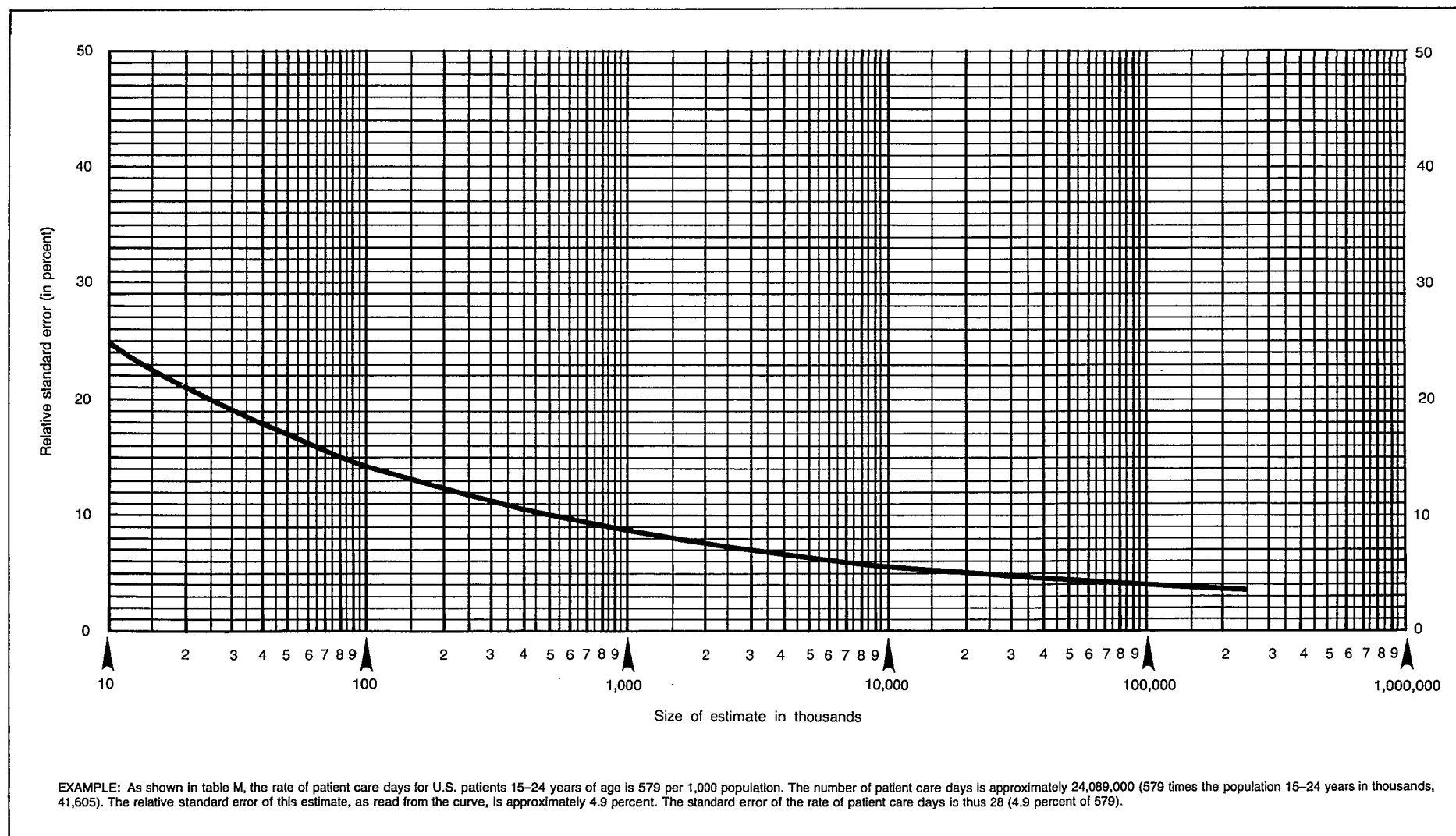
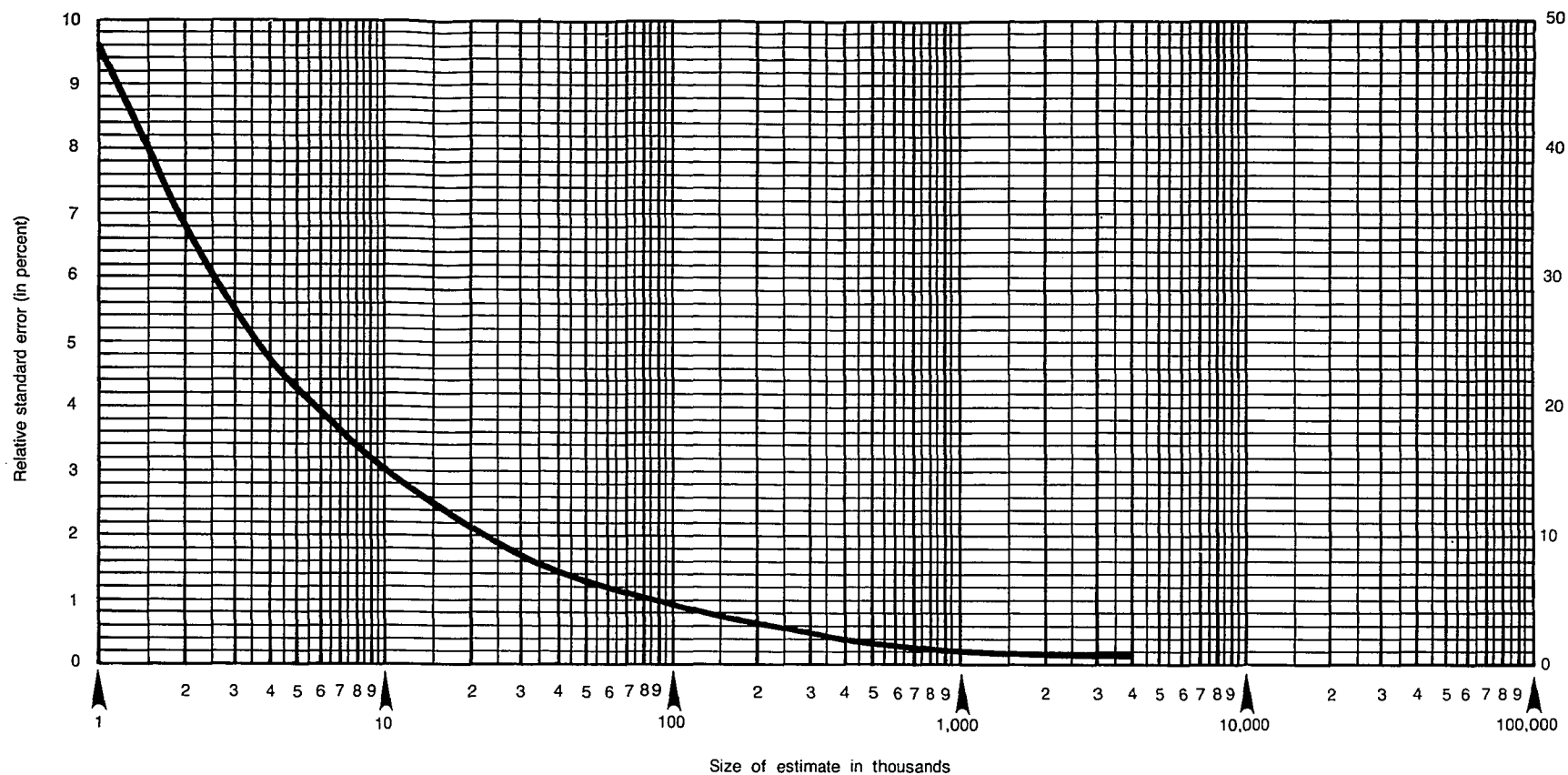
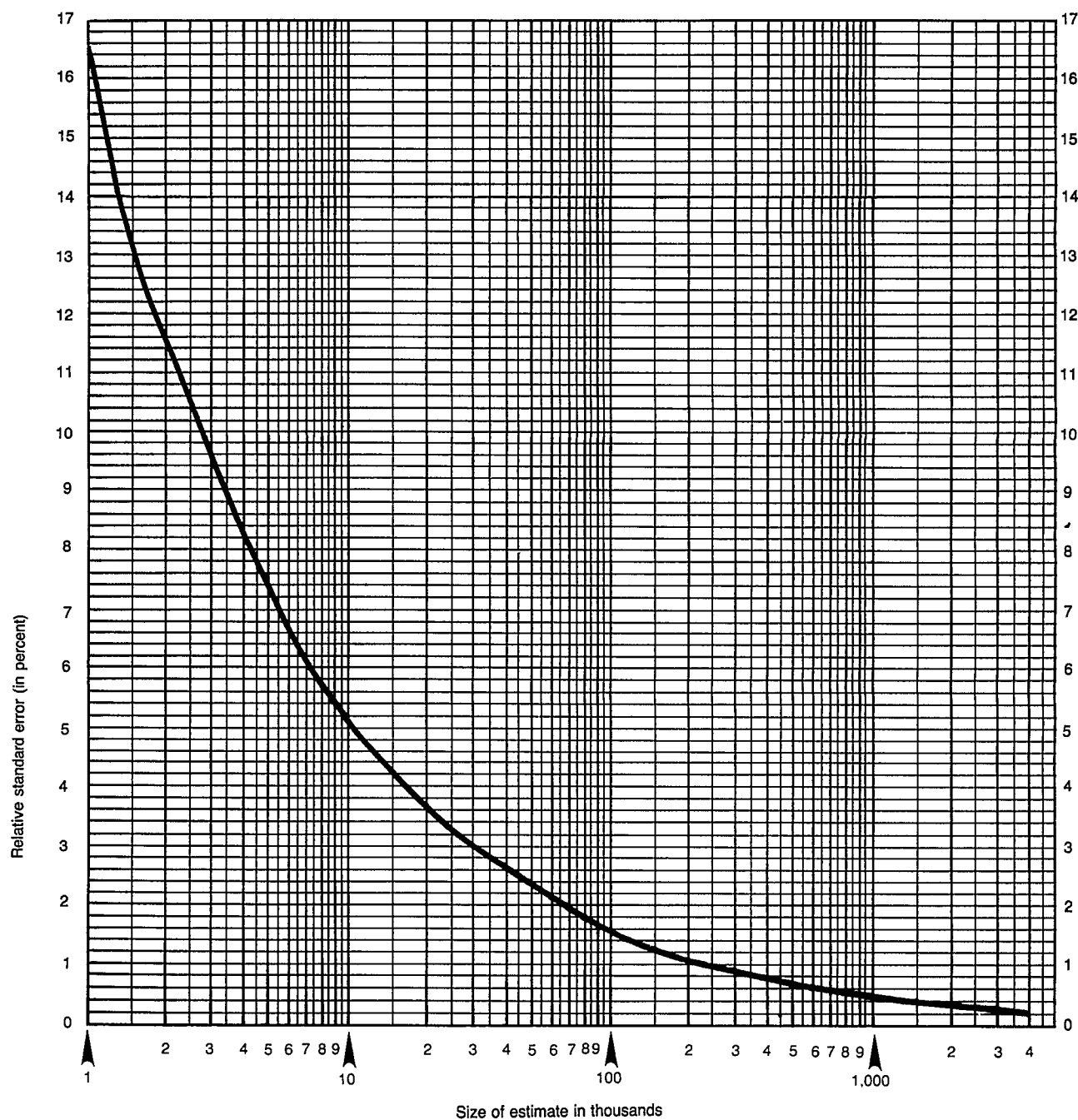


Figure V. Approximate relative standard errors for number of patient care days: United States, 1980



EXAMPLE: As shown in table CC, the Polish discharge rate for patients 45–64 years of age with neoplasms is 13.5 per 1,000 population. The number of discharges for neoplasms is approximately 96,600 (13.5 times the population 45–64 years in thousands, 7,155). The relative standard error of this estimate, as read from the curve, is approximately 0.9 percent. The standard error of the discharge rate is thus 0.12 (0.9 percent of 13.5).

Figure VI. Approximate relative standard errors for number of patients discharged or for diagnoses: Poland, 1980



EXAMPLE: As shown in table 9, the Polish rate of patient care days for patients 65 years of age and over with a diagnosis of cataract is 51.0 per 1,000 population. The number of patient care days for cataract is approximately 183,500 (51.0 times the population 65 years and over in thousands, 3,598). The relative standard error of this estimate, as read from the curve, is approximately 1.2 percent. The standard error of the rate of patient care days is thus 0.6 (1.2 percent of 51.0).

Figure VII. Approximate relative standard errors for number of patient care days: Poland, 1980

Characteristic	United States	Poland
Presentation of estimates	Based on consideration of the complex sample design of NHDS, estimates derived from a sample of fewer than 30 records are not reported. Such estimates are replaced in the tables by an asterisk (*). Estimates based on a sample of 30–59 abstracts are reported, but should be used with caution. These estimates are preceded by an asterisk (*) in the tables.	All estimates from the GHMS are presented, except those with a relative standard error of 30 percent or more, which are replaced in the tables with an asterisk (*).
Computation of rates	The population estimates used to compute hospital use rates, shown in detailed table 1, are for the civilian population on July 1, 1980. Rates for infants under 1 year of age were calculated using the number of live births in 1980, which was 3,612,258 for both sexes, 1,852,616 for males, and 1,759,642 for females. Death rates were computed using the resident population as enumerated in the census on April 1, 1980. The population estimates are consistent with Series P-25 of <i>Current Population Reports</i> , by the U.S. Bureau of the Census.	The population estimates used to compute rates, shown in detailed table 1, are for the resident population on June 30, 1980. Rates for infants under 1 year of age were calculated using the number of live births, which was approximately 692,000 for both sexes—355,000 for males and 336,000 for females. These estimates were obtained from the Polish Central Statistical Office.
Tests of significance	The determination of statistical inference was based on the two-tailed <i>t</i> -test with a critical value of 2.576 (0.01 level of significance). Terms relating to differences, such as “higher” and “less,” indicate that differences were statistically significant. Terms such as “similar” and “no difference” mean that no statistically significant difference was found between the estimates compared. A lack of comment does not necessarily mean that the difference was tested and found not to be significant.	The same procedure was followed for comparison of Polish estimates and for comparison of Polish with U.S. estimates as is described for comparison of U.S. estimates.

Appendix III

Definitions of terms

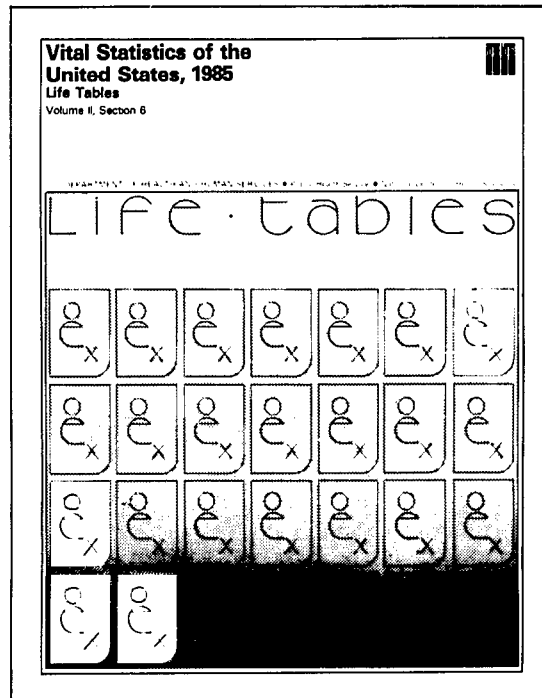
Term	United States	Poland
Age	Age refers to the age of the patient on the birthday prior to admission to the hospital inpatient service.	For patients under 1 year of age, age refers to age at the time of admission, which is recorded as either under 1 month (newborn) or 1 month to 11 months 30 days (infant). The ages of patients 1 year and over are computed by subtracting the year of birth from the year of hospitalization.
Average length of stay	The average length of stay is the total number of patient days accumulated at the time of discharge by patients discharged during the year divided by the number of patients discharged.	The definition is the same as in the United States.
Complicated delivery	A delivery is complicated if there is any abnormality or complication or any mention of fetal manipulation or use of instrumentation. A delivery of multiple gestation is considered complicated. Patients who have a diagnosis of normal delivery but also one or more secondary diagnoses are considered to have a complicated delivery. Complicated deliveries are included in this report.	A complicated delivery involves complications or other conditions that lengthen hospitalization. Complicated deliveries are included in this report.
Diagnosis	A diagnosis is a disease or injury (or some factor that influences health status and contact with health services) listed by the attending physician on the patient's medical record. A maximum of seven diagnoses can be abstracted from the face sheet (summary sheet) of the medical record for the NHDS, but only the principal diagnosis (or the diagnosis listed first, if a principal diagnosis is not identified) is used in this report. The principal diagnosis is the condition established after study to have been chiefly responsible for occasioning the admission of the patient to the hospital for care. The diagnosis is assigned a code of up to five digits according to the <i>International Classification of Diseases, 9th Revision, Clinical Modification</i> (ICD-9-CM) (U.S. Public Health Service and Health Care Financing Administration, 1980). In this report, the number of diagnoses is equivalent to the number of discharges.	A diagnosis is a disease or injury (or some factor that influences health status and contact with health services) regarded by the patient's physician as the principal reason for the hospitalization. For patients discharged dead, the underlying cause of death is considered the diagnosis. The diagnosis is assigned a three-digit code according to the Ninth Revision, International Classification of Diseases (World Health Organization, 1977). As for the United States, the number of diagnoses is equivalent to the number of discharges in this report.
Discharge	A discharge is the formal release of a patient by a hospital: that is, the termination of a period of inpatient hospitalization by death or by disposition to the place of residence, a nursing home, or another hospital. The terms "discharge" and "patient discharged" are used synonymously.	The definition is the same as for the United States. As in the NHDS, transfers from one ward to another within the same hospital are not considered discharges.

A list of references follows the text.

Term	United States	Poland
Discharge rate	For patients 1 year of age and over, the ratio of the number of hospital discharges during the year to the number of persons in the civilian population determines the discharge rate. For infants under 1 year of age, the number of live births during the year rather than the population was used to compute the discharge rate.	The definition is the same as for the United States, except that the resident population on June 30 was used to calculate discharge rates for patients over 1 year of age.
Fatality	A fatality is an inpatient whose hospitalization is terminated by death.	The definition is the same as for the United States.
Fatality rate	The ratio of the number of patients discharged dead during the year to the total number of discharges is the fatality rate.	The definition is the same as for the United States.
Hospital	Short-stay general and specialized hospitals have six or more beds and an average length of stay of less than 30 days. Federal hospitals and hospital units of institutions are not included.	General and specialized hospitals are operated by the Ministry of Health and Social Welfare and the Ministry of Transportation. None of these hospitals is excluded because of size or length of stay. Psychiatric units and the few hospitals of the Ministries of National Defense and of Internal Affairs and Justice are not included.
Newborn infant	A newborn infant is defined as a patient admitted to the hospital by birth. Newborn infants are not included in this report unless they were sick.	Infants under 1 month of age at the time of admission are considered newborn infants. They are not included in this report unless they were sick.
Normal delivery	A normal delivery is a spontaneous cephalic delivery (that is, presentation of the child head first and delivery of the child without external aid). No mention is made of any abnormality or complication, and the single ICD-9-CM code of 650 is assigned to the patient. Normal deliveries are not included in this report.	A normal delivery is one without complications or other conditions that lengthen hospitalization. Normal deliveries are not included in this report.
Patient care days	The total number of days of inpatient hospital care accumulated at the time of discharge by patients discharged during a year constitutes patient care days. A stay of less than 1 day (patient admission and discharge on the same day) is counted as 1 day in the summation of total patient care days. For patients admitted and discharged on different days, the number of patient care days is computed by counting all days from (and including) the day of admission to (but not including) the day of discharge.	The definition is the same as for the United States.
Population	The civilian population on July 1, 1980, is the resident population excluding members of the Armed Services. The estimate is based on the 1980 census and ongoing surveys of the U.S. Bureau of the Census. The number of live births is the number reported for 1980.	The resident population on June 30, 1980, is based on the 1978 census, birth and death registers, and migration data. The number of live births is one-fourth of the number of live births in 1979 plus three-fourths of the number of live births in 1980.
Rate of patient care days	For patients 1 year of age and over, the rate of patient care days is the ratio of the number of days of hospitalization accumulated at the time of discharge by patients discharged during the year to the number of persons in the civilian population on July 1. For infants under 1 year, the number of live births rather than the population was used to compute the rate of patient care days.	The definition is the same as for the United States except that the resident population on June 30 was used to calculate the rate of patient care days for patients 1 year of age and over.

Term	United States	Poland
Sick newborn infant	Sick newborn infants have a diagnosis in addition to the designation of single or multiple birth (ICD–9–CM codes V30–V39). Sick newborn infants are included in this report.	Newborn infants are defined as sick if they have conditions that require treatment during their hospitalization. Sick newborns are included in this report.

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